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End User Perspectives on Last Mile Logistics

Action 8. Output 4.

Investing in Opportunities

This project has received European Regional Development Funding through INTERREG IV B.

INTERREG IVB

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Executive Summary

Urban logistics are an integral part of daily life; we want our goods and services to be available to us when they are needed. However, this delivery and servicing activity in cities leads to problems of air pollution, noise, traffic congestion, and road safety. These problems make our cities less economically competitive and less pleasant places to be.

LaMiLo (last mile logistics),an INTERREG IVB North West Europe (NWE) project funded by the European Regional Development Fund (ERDF), aims to create a step change in freight deliveries by fully considering the 'last mile' of a supply chain when planning a freight logistics journey, ensuring a more efficient and integrated logistics approach throughout North West Europe. Demonstrators in Camden, Paris, Brussels and The Netherlands have provided examples of consolidation centre operations. This report focuses on **end user perspectives of last mile logistics**.

End users are defined as organisations, businesses and or individuals who use the last mile logistics solutions in order to receive their goods, or logistics operators who use last mile logistics solutions as part of their business model.

This End User Perspectives report summarises feedback from three different initiatives associated with last mile logistics solutions, in which the end user is involved at different stages of the solution. Feedback from the end users of the operational LaMiLo demonstrators in the Netherlands and Paris was not available within the lifetime of the project and therefore could not be included in this report. The three initiatives and the findings from their end user assessments are:

Cross River Partnership's Clean Air Better Business programme
Camden's London Boroughs Consolidation Centre
Brussels' Urban Consolidation Centre

Cross River Partnership's Clean Air Better Business (CABB) programme.

CABB is mitigating road transport pollution from sources including the freight industry, through raising awareness and capacity building directly with all businesses within geographically defined areas (through business membership groups such as Business Improvement Districts, BIDs). The end users are these businesses.

CABB involves end users in the stage <u>before</u> a last mile logistics solution is developed. **Findings:**

1. The results show significant degrees in end user awareness of the different issues, but much lower levels of end user participation in schemes impacting on air quality.

2. There are some interesting examples of initiatives being developed by some Business Improvement Districts (BIDs) including engagement with air quality and freight reduction schemes within the local borough.

3. These results suggest there is some significant potential for consolidation schemes and other last mile logistics solutions, including Cleaner Transport Modes and Accreditation & Safety schemes, to be promoted across a wide range of Business Improvement Districts. (For more details on last mile logistics policy measures see Cross River Partnership's LaMiLo report 'Public Sector Influence in Last Mile Logistics. Action 8, Output 5.')

4. General responses from businesses for further information on Delivery and Servicing Plans and the examples of BIDs beginning to engage on air quality issues suggest that BIDs have the potential to play a significant role in assisting businesses to participate in last mile logistics solutions that have a positive impact on air pollution.

5. The survey highlights that, where successful engagement with BIDs has taken place, it is possible for a central London BID to engage businesses on air quality issues, after receiving input from the local borough or other local partners. There is a need to develop freight related air quality programmes to promote further engagement between BIDs Boroughs and key stakeholders, including regional public authorities. These programmes should take a holistic approach to tackling the contribution of last mile logistics to air pollution for example encouraging end users to adopt sustainable transport, and sustainable procurement policies, and strengthen Corporate Social Responsibility (CSR) commitments and activities.

Camden's London Boroughs Consolidation Centre (LBCC).

Camden Council together with partners Waltham Forest and Enfield Councils (London, UK) set up the LBCC trial in January 2014, in order to obtain supply chain savings and environmental benefits through procurement. The trial initially channelled four Council suppliers' deliveries to the LBCC for onward consolidated delivery to their final destination. The end user identified for this assessment was the Council Requisitioners: the staff members placing the order for the goods.

The LBCC trial involves end users in the last mile logistics solution <u>design</u> and <u>implementation</u> stages.

Findings:

1. Most end users identified the benefits (reliability of deliveries, quality of deliveries and customer service, environmental benefits, safety of deliveries and efficiency of deliveries) associated with using the London Boroughs Consolidation Centre (LBCC) as important. This reflects the comprehensive internal communications campaign run by Camden Council and its partners to promote the trial both before and during the trial itself.

2. In relation to the quality of deliveries; end users experienced improvements in the reliability of deliveries, accuracy of deliveries and customer service in relation to their deliveries through the use of the LBCC.

3. The majority of end users had not been inconvenienced by the reduction in the number of delivery days for consolidated goods.

4. 26% of end users recognized their purchasing behaviour had changed as a result of the LBCC. This has resulted in 800 fewer orders placed in one year, with the average order value increasing by 30%. This benefits not only the local authority who have less staff time involved in processing orders, receiving goods and making invoice payments; but also suppliers who have a greater number of more cost effective larger orders to process, goods to deliver and invoices to raise.

5. There is more work to do to convince end users who 'did not know' if they would like the LBCC to continue. End users that 'did know' were overwhelmingly supportive of the initiative. End user champions could promote behaviour change within the Council based on their experiences to date of using the LBCC.

6. There appeared to be no significant difference in feedback from end users of the three different councils: Camden, Enfield and Waltham Forest. Waltham Forest decided not to continue their involvement with the LBCC following completion of the trial.

Brussels' Urban Consolidation Centre (UCC).

The Brussels' UCC, commissioned by Brussels Mobility and ran by CityDepot, started in September 2014. This trial was one of a package of measures designed by Brussels Mobility to tackle increasing and scattered city centre freight movements. The end users are both the Logistics Operators (Transporters) who deliver in the city centre and the businesses (Shopkeepers) located within the city centre. Both sets of end users can chose to pay to use the UCC.

Brussels UCC involves end users in the implementation stage of the last mile logistics solution: **Findings:**

1. Logistics Operators chose to use the UCC to avoid having to enter the city centre, to reduce transportation costs, and to improve the volume and / or weight they were able to transport. Whilst they saw the benefits of improving their environmental reputation, and in improving customer service, it appears their decisions are more driven by operational cost.

2. The majority of Logistics Operators interviewed did not have environmental policies in place.

3. The Shopkeeper perspectives were diverse, with no one benefit commonly seen as most important. Perspectives appear to be different for different types of retailers, those who had previously knowledge or experience of CityDepot consolidation centre operations, those with central warehousing functions, those with specific storage requirements, and those with different numbers of weekly deliveries.

4. Each Shopkeeper received only a handful (less than five) deliveries per week, and some Shopkeepers did not see how the extra charge for use of the UCC would be cost effective, given that most of the deliveries were made during opening hours when shopkeepers were at their store anyway, and the time taken to receive deliveries was minimal.

5. The space within shops allocated to storage of goods and/or waste did not appear to be an indicator of whether the Shopkeepers would be interested in the value added services offered by the UCC. There were specific reasons for individual Shopkeepers' interest in the value added services. Many Shopkeepers expressed an interested in the removal of parcels by the UCC, as this service was considered good value for money in comparison to other providers.

6. For some Shopkeepers receiving deliveries from the consolidation centre, it was difficult for them to identify and evaluate CityDepot's consolidated deliveries separately from their other deliveries.

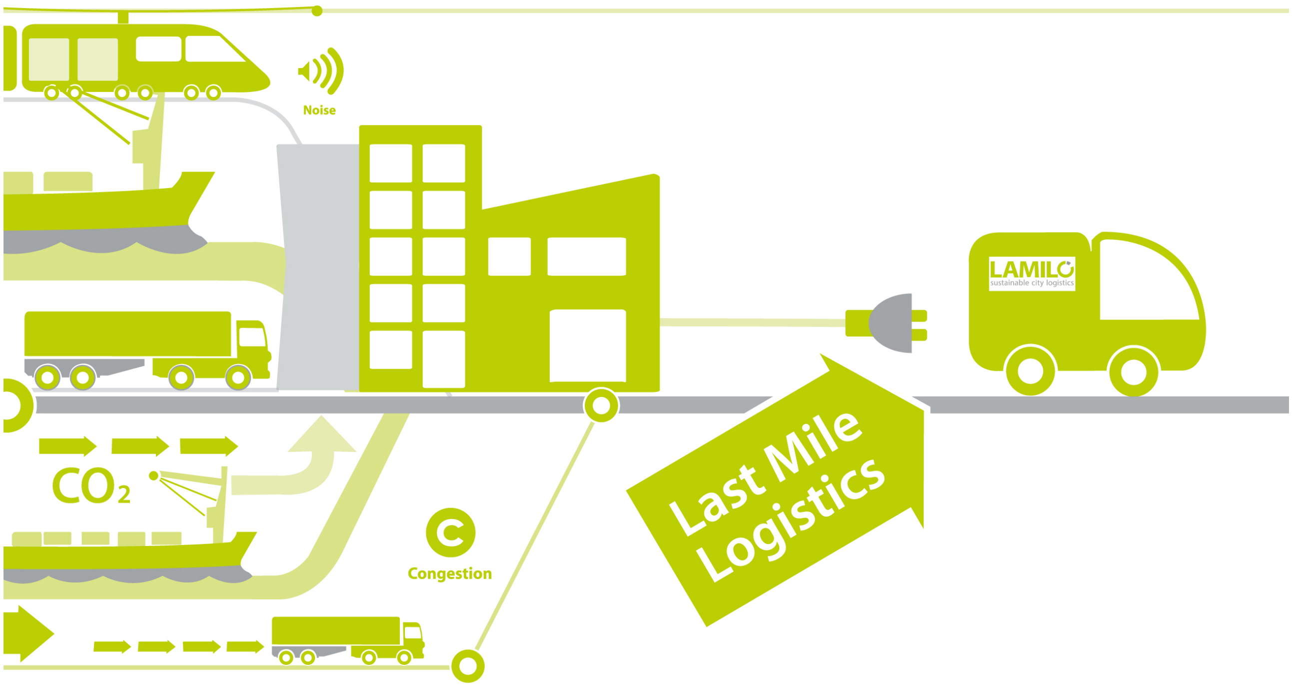
7. In general, the larger the business:

    a. the less they required a consolidation service to organize their deliveries since they organize this themselves,

    b. the less they needed a waste packaging removal service, since they already had a contract with a waste enterprise and / a container,

    c. the less they needed storage facilities, since they already had these.

8. Many Shopkeepers are used to their current delivery arrangements, which although may not be ideal, are familiar and 'work' for the shops. One of the furniture Shopkeepers interviewed explained he receives deliveries at home or through his neighbours and says this arrangement 'is perfect'. Clearly articulating costs and benefits of last mile logistics solutions, which helps in the identification and agreement of the 'problem' , is therefore the first step required in a behaviour change programme.



End User Perspectives - Recommendations

Recommendations have been drawn from the findings of the end user assessments above. Action has been identified in relation to each recommendation, for the key stakeholders Policy Maker, Logistics Operator and End User.

Recommendation	Action
1. Involve end users at an early stage in the design and implementation of last mile logistics solutions to build ownership and understanding of the benefits and costs associated. Install End User Champions to encourage more reluctant end users to adopt last mile solutions, and get involved.	Policy Maker End User
2. Seek to enter into agreements / contracts with end users in the early stages of last mile logistics solutions development and implementation to ensure solution is utilised, where relevant.	Logistics Operator
3. Develop last mile logistics solutions for end users that are within a large organisation, or part of a wider business group, that is supportive of initiatives to minimise the impact of urban delivery and servicing activity.	Policy Maker Logistics Operator End User
4. 'Lead the Way'. Stakeholders can wear many 'hats'. A policy maker is also an end user. As such the policy maker can lead the way to design and implement their own last mile logistics solution, providing political support to specific actions and engage with other key stakeholders to effect change. Logistics Operators and businesses can proactively change their last mile logistics arrangements.	Policy Maker Logistics Operator End User
5. Provide clear cost and benefits to end users to enable them to make decisions about participating in last mile logistics solutions.	Policy Maker
6. Ensure specific knowledge of potential end user requirements for value added services to accurately inform any business plan. Do not assume end users will want or need value added services on offer.	Policy Maker Logistics Operator
7. Initiate a behaviour change programme to encourage end users to develop more sustainable procurement and sustainable transport policies and practices.	Policy Maker End User
8. Engage with a range of end users through business groups such as Business Improvement Districts. Encourage business groups to include air quality management and last mile logistics within their remit.	Policy Maker
9. Encourage all businesses to adopt environmental policies as part of wider Corporate Social Responsibility agendas to improve recognition of their efforts to minimise air pollution and traffic congestion.	Policy Maker Logistics Operator End User
10. Gather and communicate the experiences of end users in last mile logistics solutions, as part of a wider behaviour change programme. Share these experiences locally, sub-regionally, nationally, and across Europe to encourage knowledge transfer.	Policy Makers

1.0 Introduction to LaMiLo and End Users

Urban logistics are an integral part of daily life; we want our goods and services to be available to us when they are needed. However, this delivery and servicing activity in cities leads to problems of air pollution, noise, traffic congestion, and road safety. These problems make our cities less economically competitive and less pleasant places to be.

LaMiLo (last mile logistics), an INTERREG IVB North West Europe (NWE) project funded by the European Regional Development Fund (ERDF), aims to create a step change in freight deliveries by full considering the 'last mile' of a supply chain when planning a freight logistics journey, ensuring a more efficient and integrated logistics approach throughout North West Europe. The project brings together experts from all sectors of the freight transport industry to change behaviour of private companies, the public sector and consumers to make better use of existing transport infrastructure and networks.

There are many stakeholders in relation to last mile logistics including legislators; policy makers; funders; transporters; logistics operators; end users; road users; residents; citizens; businesses; and sector representative bodies (in sectors such as transport, freight, technology, safety, air pollution, quality place-making, businesses, climate change); architects and planners.

This report focuses on **end user perspectives of last mile logistics**. Learning about the views and experiences of end users in last mile logistics solutions will help design more sustainable solutions in the future.

1.1 What is an End User?

End users are defined as organisations, businesses and or individuals who use the last mile logistics solutions in order to receive their goods, or logistics operators who use last mile logistics solutions as part of their business model. This can be different depending upon the solution. For example, business, retailers, logistics operators, private individuals or consumers may use a consolidation centre. In another example, where regulations to the city centre restrict access for delivery purposes to morning and late afternoon slots, the end users will be those businesses and consumers who are awaiting delivery of their goods. End users will be affected differently by policy measures. In some, but not all, cases the end user will have direct relationship with the logistics operator. Within LaMiLo the demonstrators have been either business to business (B2B), or business to consumer (B2C). LaMiLo has not considered logistics solutions within the context of consumer to consumer (C2C) relationships.

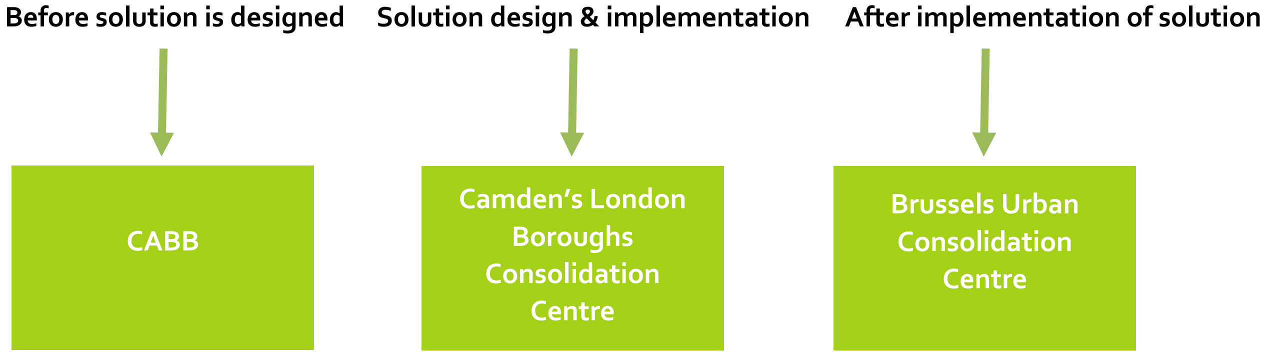
1.2 End User Perspectives and their involvement in last mile logistics solutions.

This report will review end user perspectives of last mile logistics solutions, through end user assessments from two LaMiLo demonstrators: Brussels' Urban Consolidation Centre and Camden's London Boroughs Consolidation Centre. Feedback from end users from the other two operational LaMiLo demonstrators in the Netherlands and Paris was not available within the lifetime of the project and therefore could not be included in this report.

In order to ensure a broad range of end user perspectives is considered, end user views of the London based Clean Air Better Business (CABB) programme is included. Cross River Partnership's Clean Air Better Business (CABB) programme aims to improve air quality in central London. It is working with central London businesses, raising awareness of air pollution caused by the freight industry and by taxis. It is ultimately seeking to change the behaviour of businesses. The businesses themselves are the end users and CABB offers an opportunity to identify end user perspectives on freight as a contributor to air pollution, even before a last mile logistics solution has been implemented.

Each of these initiatives involve end users at different stages of last mile logistics solutions, from 'early' awareness raising and collective action to tackle the challenge of air pollution arising from last mile logistics; to designing and implementing a more sustainable last mile logistics solution; to becoming involved once the last mile logistics solution has been implemented. **This is demonstrated at figure 1 below:**

Figure 1: End Users Involvement in Last Mile Logistics Solutions



Each initiative is considered in turn including introductory information, identification of end users, and a summary of the results: the end user perspectives. The methodology of how each initiative's end user perspectives were delivered can be found in Appendix 1. Findings for each initiative and a series of overall recommendations for Policy Makers, Logistics Operators and End Users themselves, based on these findings, is presented.

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Clean Air Better Business Programme, London (UK)

2.1 Introduction to the initiative

CLEAN AIR BETTER BUSINESS

In 2008 the EU set legally binding limit values for concentrations of the most harmful air pollutants. These limits were transposed into English law under the Air Quality Standards Regulations 2010. The same year the London Mayor set out his policies and proposals for improving air quality in London in 'Clearing the Air'. The strategy sits alongside and complements The London Plan and Transport Strategy and other Mayoral Supplementary Planning Guidance.

The Mayor's air quality strategy recognises that everyone needs to play their part in improving London's air quality – the GLA, TfL, local authorities, businesses and private citizens.

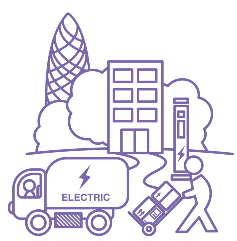
The introduction of the Congestion Charging and Low Emissions Zones in London are just two of the more visible steps that have been taken to improve London's air quality. In February 2013 the Mayor, supported by TfL, launched the Mayor's Air Quality Fund (MAQF) providing match-funding for innovative, local schemes, projects and trials to tackle air pollution. The fund offers £6m over the three years to 2015/16, with the possibility of up to £20m being made available in subsequent years.

Cross River Partnership submitted a successful bid to the MAQF in May 2013 on behalf of central London local authorities, Business Improvement District (BID) and employer groups to deliver the £630,000 three year Clean Air Better Business (CABB) programme. The CABB programme will mitigate road transport pollution from the freight and taxi industry. This is done by raising awareness and capacity building with BID members and the wider business community.

Business Improvement Districts (BIDs) are business led partnerships which are created through a ballot process to deliver additional services to local businesses. They can be a powerful tool for directly involving local businesses in local activities and allow the business community and local authorities to work together to improve the local trading environment. For more information please see https://www.gov.uk/business-improvement-districts.

The aims of CABB are to work directly with businesses through Business Improvement Districts and Employer Groups to:

- raise the profile of air quality issues and build capacity for action within key target groups (businesses, freight and taxis);
- reduce harmful emissions of Nitrogen Dioxide (NO$_2$) and Particulate Matters (PM$_{10}$ and PM$_{2.5}$), as well as Co$_2$
- improve air quality around hotspots
- assist local authorities in achieving 'clear air borough' status
- make a positive contribution to improving public health



- contribute to the delivery of the planned Ultra Low Emissions Zone (ULEZ); and
- develop evaluation based learning that will inform future action

2.2 Who are the end users?

The end users within the CABB programme are the businesses themselves. Understanding their perspectives on air quality, and the actions they currently take, or would be willing to take, to address poor air quality; offers a different perspective than end users involved in existing consolidation centre schemes in London and Brussels.

2.3 Clean Air Better Business: End User Perspectives

A survey was designed in order to identify:-

- **AWARENESS:** Provide a clear picture of the current levels of awareness within BIDs and BID member organisations relating to air quality issues
- **CAPACITY:** Identify capacity of BIDs to act to rising air quality levels
- **ACTIVITIES AND INTERVENTIONS:** Highlight existing mitigation activities in CABB's delivery areas

The aim of the survey was to provide an accurate and reliable picture of existing 'practice'.

The survey was carried by out in two parts:-

- An on-line questionnaire
- Follow-up telephone survey of selected respondents

Copies of these surveys can be found in Appendix 4.

The survey was open between 15th December 2014 and 9th March 2015 (11 weeks) during which 113 valid responses were received. The response rate was lower than anticipated based upon the potential number of businesses within BID areas, and perhaps a reflection of the lack of engagement by businesses in relation to these issues.

In the email sent to organisations it was requested that respondents with specific areas of responsibility within the business completed the baseline assessment quantitative survey, stating which division they were responsible for within their organisation. Where this was not applicable a representative with a clear understanding of the business was requested. 20 of the 113 responses were from representatives who did not have responsibility for any of the identified divisions within their organisation. In this instance, these representatives were asked to close the survey (at this point) and pass on the survey link to a colleague within their organisation who had the necessary responsibility. 93 responses remained after these were removed from the subsequent analysis. The greatest numbers of respondents completing the survey were from an employee health and wellbeing division, environmental policy / operations division or procurement.

Responses received by BID & company sector division

Of the 93 respondents who completed the question on company size 11% were from Micro / Minute organisations (<10), 37% from small organisations (<25), 28% from medium organisations (<250), 13% from large organisations (<1000) and 11% from enterprise (>1000) organisations.

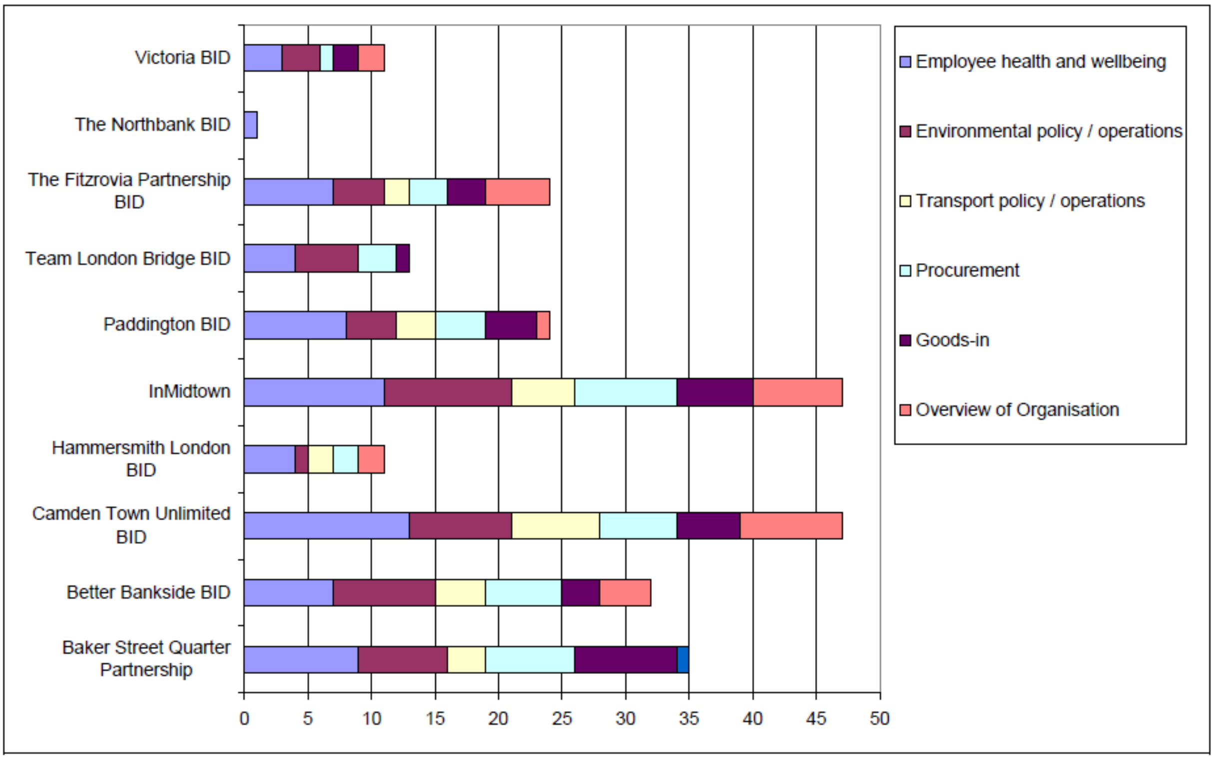


Figure 2: CABB: End User responses received by Business Improvement District & company / sector division

Results - Awareness

There was a significant difference between individual awareness of air quality issues (shown by 62% of those respondents), compared to 87% of these respondents who did not think the organisation they represent actively obtains information on air quality, and 35% felt their organisation actively works towards mitigating poor air quality at a corporate level.

Yet, 93% felt businesses have a part to play in improving air quality.

There was a greater awareness of issues surrounding staff travel schemes than schemes for reducing impacts on freight and deliveries; however it is not clear that adequate contacts were made with the appropriate staff in relation to freight which may impact on these findings.

Results - Capacity

There was no clear picture from this limited survey for the development of consolidation schemes.

The BIDs interviewed did not manage significant fleets of their own vehicles, but were generally aware of the options for procurement of low emission vehicles. None participated in the Fleet Operator Recognition Scheme (FORS). There were low levels of implementation of fleet management practices, in relation to eco-driving or fuel management plans to promote fuel saving.

Results - Activities and Interventions

There was a low level of engagement in relation to freight management interventions, and only 5% responded that they have Delivery and Service Plans.

Questions surrounding the extent of policies in place on air quality were dominated by green procurement, Green Business initiative and staff travel schemes, with only isolated examples (3%) of BID's displaying any reference to air quality on their web pages (December 2014). A new air quality 'app' has been developed by the CABB programme and now appears on the participating BIDs' websites (listed at Appendix 5).

There was a significant response (40%) for further information on Delivery and Service Plans.

Results - Examples of Good Practice

The work between the London Borough of Camden and the Fitzrovia Partnership has led to the Cleaner Air for Fitzrovia' project. This followed on from the promotion of Clean Air Champions by Camden Council.

Camden Town Unlimited is offering free wall mounted EV charge units to businesses, free cycle stands and promoting walking champions.

The Northbank BID is assessing air pollution, amenity & carbon storage and long term sustainability, plus developing a communications plan on local impacts of air quality.

Paddington BID has recently completed a Green Infrastructure Audit and is actively encouraging businesses to reduce carbon emissions in collaboration with Westminster City Council's Air Quality Programme.

South Bank & Waterloo Neighbours (SoWN) working group, (part of South Bank Employers Group) focuses on green infrastructure and air quality.

Victoria BID has launched an air quality engagement and activity programme examining ways to reduce emissions within the supply chain, working with staff to promote walking and cycling and providing advice on boilers that help to reduce emissions. Businesses in the Victoria BID have also developed Legible London maps of walking routes. Some integrate air quality into the ISO 14001 and Corporate Social Responsibility (CSR) policies. Additionally the BID team provides free air quality advice and support for other local businesses.

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2.4 Findings

1. The results show significant degrees in end user awareness of the different issues, but much lower levels of end user participation in schemes impacting on air quality.

2. There are some interesting examples of initiatives being developed by some Business Improvement Districts (BIDs) including engagement with air quality and freight reduction schemes within the local borough.

3. These results suggest there is some significant potential for consolidation schemes and other last mile logistics solutions, including Cleaner Transport Modes and Accreditation & Safety schemes, to be promoted across a wide range of Business Improvement Districts. (For more details on last mile logistics policy measures see Cross River Partnership's LaMiLo report 'Public Sector Influence in Last Mile Logistics. Action 8, Output 5.')

4. General responses from businesses for further information on Delivery and Servicing Plans and the examples of BIDs beginning to engage on air quality issues suggest that BIDs have the potential to play a significant role in assisting businesses to participate in last mile logistics solutions that have a positive impact on air pollution.

5. The survey highlights that, where successful engagement with BIDs has taken place, it is possible for a central London BID to engage businesses on air quality issues, after receiving input from the local borough or other local partners. There is a need to develop freight related air quality programmes to promote further engagement between BIDs Boroughs and key stakeholders, including regional public authorities. These programmes should take a holistic approach to tackling the contribution of last mile logistics to air pollution for example encouraging end users to adopt sustainable transport, and sustainable procurement policies, and strengthen Corporate Social Responsibility (CSR) commitments and activities.

3.0 London Boroughs Consolidation Centre, London (UK)

3.1 Introduction to the Initiative

Camden Council, with partners Waltham Forest and Enfield Councils in London (UK) identified that supply chain savings and environmental benefits could be obtained through procurement. One approach to achieve this was to set up the London Boroughs Consolidation Centre (LBCC), a facility that channels suppliers' deliveries into one central point. The goods are sorted into fewer vehicles for the final 'leg' (last mile) of the journey to Council sites, on a just in time basis. The LBCC is not designed to be a warehouse for long term storage. Following the study and initial trial, Islington Council joined the LBCC, and Waltham Forest left the LBCC.

The 2,000sq ft. LBCC is based in Edmonton and is currently operated by DHL. It serves over 300 council buildings across the three boroughs in Central and North London.

When it first opened in January 2014, only four suppliers were delivering to the LBCC. They focused on 'everyday' product lines such as stationary and cleaning products.

Since Camden Council's move to its new civic building at Pancras Square in spring 2015, the number of suppliers and couriers using the LBCC has continuously increased and as of July 2015 stands at 140.

All inbound goods from the four initial suppliers are delivered to the LBCC at pre-agreed time (6.30am-8.00am). Goods from other suppliers can arrive at any time between 6.30am-6.00pm. The goods are then consolidated and delivered to the Councils' buildings (9.30am-4.00pm) by DHL, with collections returned to LBCC.

Two vehicles are currently making the final delivery to council buildings. The trial ran initially with Euro V diesel vehicles. The environmental credentials of the centre were further enhanced following the introduction of an electric Nissan commercial vehicle. Vehicles are now operating at 80% or higher utilisation. In the first 12 months of operation, the LBCC consolidated 51,000 items for delivery fulfilling 9,700 orders. Only 0.64% of items were returned.

Before the pilot, the four main suppliers delivered the three council's buildings independently and mixed the deliveries for the councils with the deliveries for other customers. Depending on the type of supply and on the organisation of the supplier, the delivery could occur from one to several times per day for each supplier. One supplier also delivered the council's buildings from two different depots.

After the start of the pilot, the suppliers no longer delivered to the council's buildings directly but delivered the LBCC instead. However the situation is different for each supplier. For two of the suppliers the goods are collected directly by the operator of the LBCC during its delivery (as "front-haul" in the beginning of its round-trip or as "back-haul" at the end of its round-trip). One supplier delivers to the LBCC in its round-trip and continues to deliver to other buildings (other customers) in the delivery area. Lastly, the remaining supplier delivers to the LBCC by a direct delivery to the LBCC with no remaining deliveries in the area. Delivery frequencies are still not uniform among all suppliers, but for each of them the frequencies of deliveries have decreased when compared to the situation before the pilot, which demonstrates a kind of consolidation.

An impact assessment of the London Borough Consolidation Centre was carried out by LIST. This impact assessment evaluated the environmental benefits of the centre including changes to distance travelled, CO_2, NOx and PM emissions. An additional research report was undertaken by an MSC student from the University of Westminster "Analysis of operational and environmental benefits of a consolidation centre". This report is available from www.crossriverpartnership.org.

Following the near two year pilot project Camden Council and its partners are now (summer 2015) engaged in a procurement exercise to search for a logistics partner to deliver the service on a long term basis.

Camden Councillor Theo Blackwell, Cabinet Member for Finance and Technology Policy said: *"With tens of thousands of deliveries coming into our buildings each year, we've had to rethink how we could re-organise them in a more economic and environmentally friendly way.*

"The pilot has shown that environmental and operational benefits for residents, businesses and Council staff can be achieved. It has seen 50,000 items delivered to over 250 council buildings so far, leading to a 46% reduction in the number of vehicle trips and a 45% reduction in kilometres travelled[1].

"We have developed a four year plan which anticipates the volume of goods going through the consolidation centre will increase considerably. Already a number of new partners and users have expressed an interest in joining the service including Business Improvement Districts, schools, universities, other London Borough councils, and retailers who are keen to receive the environmental, financial, operational and customer experience benefits."

3.2 Who are the end users?

There are a number of different stakeholders involved in the LBCC including:

- Office & Cleaning Suppliers: Four companies involved in the initial trial: Banner, Bunzl Greenham, Janitorial Express, and Office Depot.
- Logistics Operator of the LBCC: DHL.
- Council Requisitioners: The staff member who places the order for the goods. There are over 300 individual council requisitioners identified within this trial.
- Council Product User: The staff member who use the goods. This may be the same person as the Council Requisitioner. There are more than 3000 product users within LB Camden alone.

For the purposes of this assessment, the Council Requisitioners were identified as the end users.

[1] Based on the findings of the University of Westminster MSC evaluation.

3.3 London Boroughs Consolidation Centre: End User Perspectives

The methodology for establishing the end user perspectives can be found in Appendix 1.

The survey was carried out in the London Boroughs of Camden, Enfield & Waltham Forest and 138 requisitioners spread across the different Council buildings responded. The results of the survey are presented below, with quotes from end users where relevant. Additional quotes from end users can be found at Appendix 2.

Number of responses per Borough:

- Camden 52
- Enfield 43
- Waltham Forest 43

The majority of these Requisitioners work in their Council's Office Buildings. Other working locations include adult learning centres, arts centres and theatres, hostels, housing estates and youth centres.

The breakdown of the location of the end users is shows in figure 3 below.

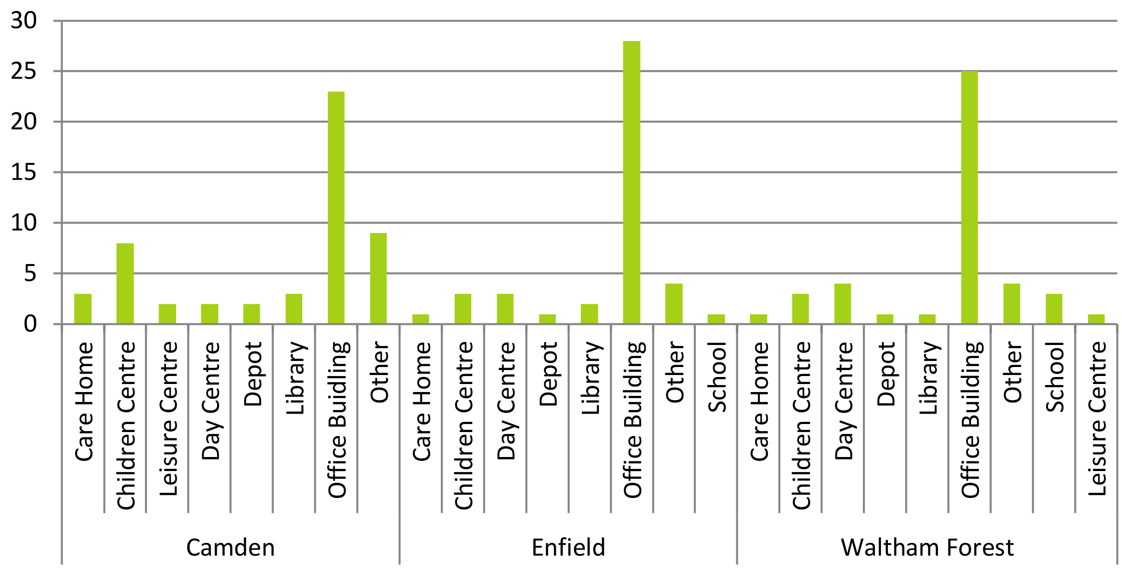


Figure 3.Camden's LBCC: Number of end users participating in survey, by borough and working location

Benefits of using the LBCC

The majority of end users rated as very important or extremely important the following anticipated benefits of using the LBCC:

- Reliability of deliveries
- Quality of deliveries and customer service
- Environmental benefits
- Safety of deliveries
- Efficiency of deliveries

A breakdown of the percentage of end user against each benefit for each rating is shown in figure 4 below:

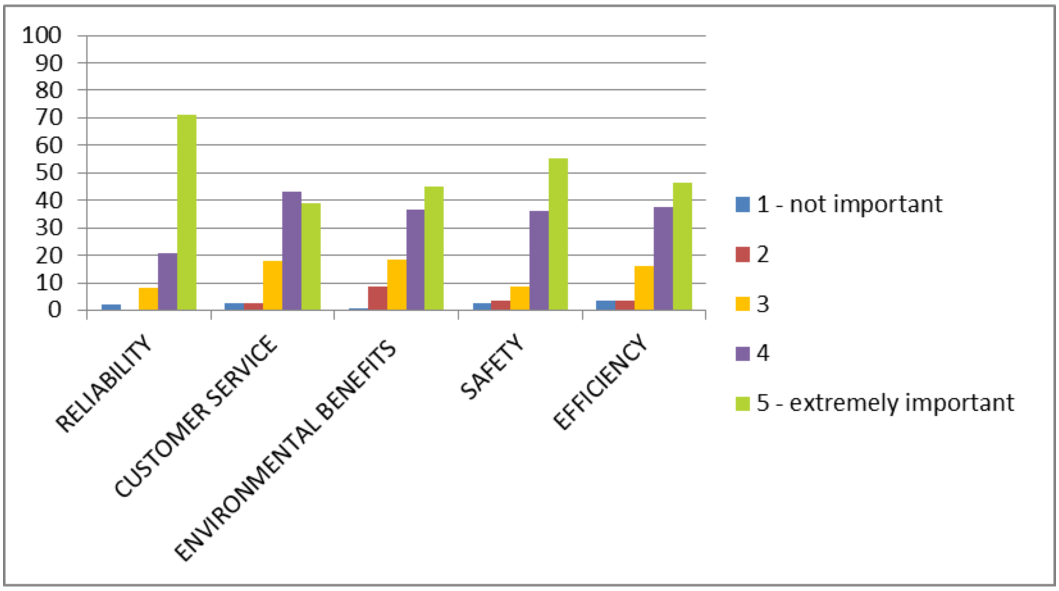


Figure 4.Camden's LBCC: Percentage of end users and rating of importance of benefits of using LBCC

Quality of deliveries

After receiving consolidation deliveries:

For **cost effectiveness/coordination:** There was a very slight shift in the time taken by end users to process deliveries moving towards a slightly increased time spent by end users receiving deliveries.

For **reliability:** There was an improvement in the reliability of deliveries from 80% of end users receiving their deliveries always or mostly on time before consolidation, to 86% of end users receiving their deliveries always or mostly on time after consolidation.

For **accuracy:** There was an increase in the level of accuracy of deliveries, from 1% of Requisitioners 'never' receiving the right deliveries, compared to 8% before consolidation.

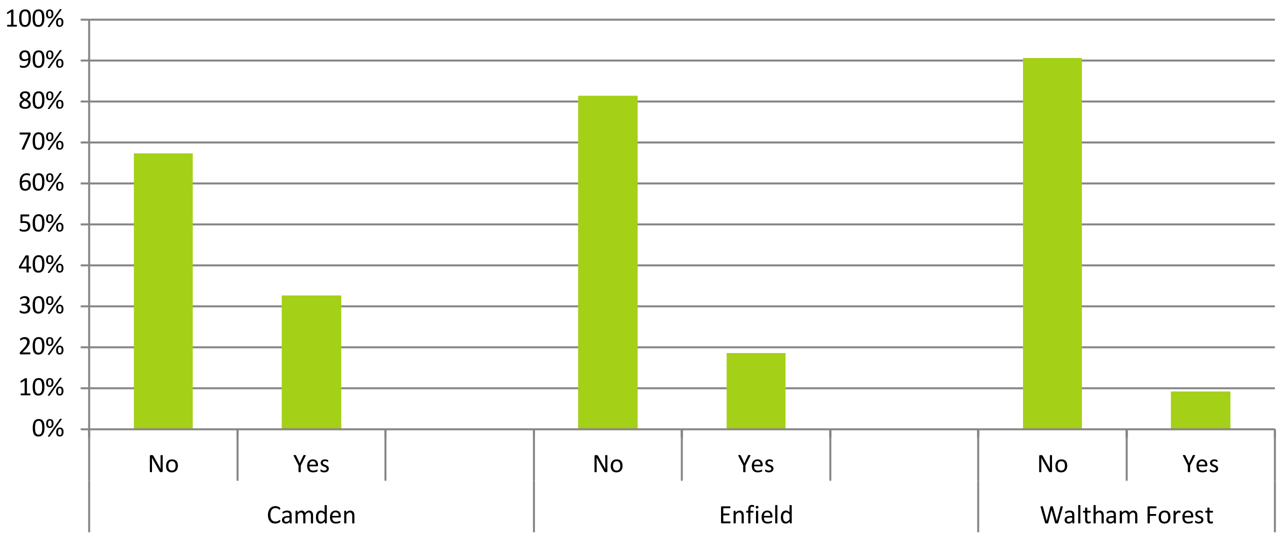
There was also an improvement in the accuracy of deliveries from 88% of end users receiving deliveries which always or mostly match their orders before consolidation, to 91% of end users receiving their deliveries which always or mostly match their orders after consolidation.

For **customer service:** There was a levelling out of end user satisfaction in relation to deliveries. After consolidation, slightly fewer end users were 'extremely satisfied' (30% before consolidation, 24% after consolidation) and slightly less 'extremely dissatisfied' (5% before consolidation, 2% after consolidation). There has been an increase in the number of people satisfied with deliveries following consolidation (13% before consolidation, 23% after consolidation).

For **efficiency:** The majority of Requisitioners in the three Boroughs stated that 'No' they have not been inconvenienced by the reduction in delivery days following the introduction of consolidated deliveries on specific days by the LBCC, as shown in figure 5. Those end users that had stated that 'Yes' they have been inconvenienced by the reduction in delivery days may be a reflection of the slight increase in time spent by end users to process deliveries after the receipt of consolidated deliveries.

Figure 5.Camden's LBCC: Percentage of end users and inconvenience by the reduction in delivery days after consolidation

"The items ordered, though required are often not an emergency and with a bit of forward planning, items can be ordered to suit both delivery and requirement times." End User



"Before the consolidation, most of the time when stationery was ordered from office depot it would normally come the next day or two but now we have a set day for delivery - I suppose it means that there is more time to get all the stationery items together." End User

"Seems the same as usual." End User

End User Behavioural change following introduction of LBCC

Whilst 74% of the end users stated that they have not changed their purchasing behaviour, a total of 26% of end users had changed their purchasing behaviour. This change is broken down in table 1 below.

Have you changed your purchasing behaviour since the trial?	%
No, I haven't changed my behaviour	74%

Yes, I have changed by behaviour:	26%
I order larger quantities of items	14%
I have increased my order value	3%
I order from more than one supplier at once	3%
I order larger quantities of items, I have increased my order value	2%
I order larger quantities of items, I order from more than one supplier at once	2%
I order larger quantities of items, I order from more than one supplier at once, I have increased my order value	1%

Table 1: Camden's LBCC: Percentage of end users and behaviour change following consolidation trial

"Staff are aware of the changes in the way we order now and have adjusted to it. As they have become aware there is not that demand to receive order now, but later. We place large order for essential things i.e. paper ink etc." End User

"I tend to wait for ordering and order more items." End User

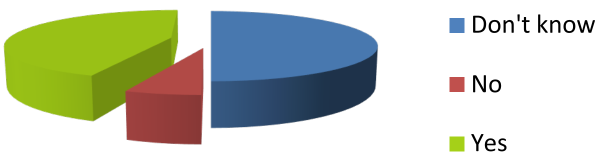
"It makes life simpler though doing so makes it harder to find storage space." End User

Asked if they would support the LBCC to include more of their suppliers of goods and to continue on a long term basis, **44% of end users said YES and only 6% said NO.**

"Any initiative to cut cost and reduce our carbon footprint is a worthy one, even if we have to wait a few days longer for items." End User

"I am not against the idea in principle but there would need to be better information between suppliers and the courier." End User

"You should try and get other London Boroughs involved." End User



3.4 Findings

1. Most end users identified the benefits (reliability of deliveries, quality of deliveries and customer service, environmental benefits, safety of deliveries and efficiency of deliveries) associated with using the London Boroughs Consolidation Centre (LBCC) as important. This reflects the comprehensive internal communications campaign run by Camden Council and its partners to promote the trial both before and during the trial itself.

2. In relation to the quality of deliveries; end users experienced improvements in the reliability of deliveries, accuracy of deliveries and customer service in relation to their deliveries through the use of the LBCC.

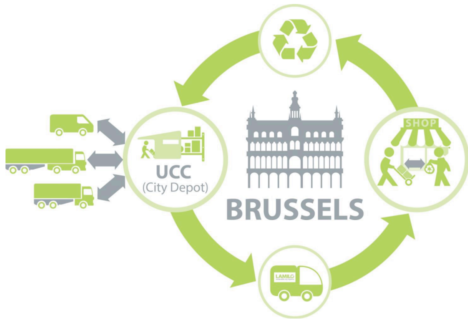
3. The majority of end users had not been inconvenienced by the reduction in the number of delivery days for consolidated goods.

4. 26% of end users recognized their purchasing behaviour had changed as a result of the LBCC. This has resulted in 800 fewer orders placed in one year, with the average order value increasing by 30%. This benefits not only the local authority who have less staff time involved in processing orders, receiving goods and making invoice payments; but also suppliers who have a greater number of more cost effective larger orders to process, goods to deliver and invoices to raise.

5. There is more work to do to convince end users who 'did not know' if they would like the LBCC to continue. End users that 'did know' were overwhelmingly supportive of the initiative. End user champions could promote behaviour change within the Council based on their experiences to date of using the LBCC.

6. There appeared to be no significant difference in feedback from end users of the three different councils: Camden, Enfield and Waltham Forest. Waltham Forest decided not to continue their involvement with the LBCC following completion of the trial.

4.0 Brussels' Urban Consolidation Centre, Brussels (Belgium)



4.1 Introduction to the initiative

In order to tackle increasing and scattered freight movements within the city centre, Brussels Mobility promoted the trial of an urban consolidation centre in favour of logistics service providers and local retailers.

In September 2014, Brussels Mobility commissioned the CityDepot/TRI-VIZOR consortium (chosen for its experience running similar operations in Belgium) to operate an urban consolidation centre located in the TIR Centre (owned by the Port of Brussels).

Here, trucks unload their goods in the early hours of the morning, usually between 6 and 9 am. The goods are then scanned, sorted according to their destination and loaded onto less polluting vehicles for onward delivery to the stores between 10am and 3pm on the same day. Value added services have been tested in addition to last mile deliveries. The trial was supported by a stakeholder group.

An impact assessment of the Brussels Urban Consolidation Centre (UCC) was carried out by LIST. This impact assessment evaluated the environmental benefits of the centre including changes to distance travelled, CO_2, NOx and PM emissions.

4.2 Who are the End Users?

Two groups of end users were identified for this initiative:

Logistics Operators (Transporters): Eight Logistics Operators have already been engaged by CityDepot (July 2015), and more are expected to join. These Logistics Operators deliver all of their goods for the city centre at the UCC, and therefore do not have to enter the city centre area. Volumes in July 2015 for five of the transporters were running at 51 pallets a day, 110 parcels a day and 84 stops a day.

Shopkeepers: CityDepot have signed up 15 Shopkeepers to use the UCC for all their deliveries (July 2015), and are actively recruiting more. CityDepot offers reverse logistics, such as the option to collect and recycle their packaging, paper, cardboard, plastics and glass (urban mining). Additional value added services include parcels pick-up and off-site storage. Those shops already signed up to use the UCC are described as 'Active'. Those shops not signed up to use the UCC but are delivered to by CityDepot on behalf of transporters using the UCC are described as 'Passive'. More than 1100 'Passive' clients (July 2015) have been delivered to by CityDepot.

4.3 Brussels' Urban Consolidation Centre: End User Perspectives

LOGISTICS OPERATORS

Four Logistics Operators who had actively signed up to use the Urban Consolidation Centre (UCC) were interviewed to understand their perspectives. Whilst this figure is too low to provide statistically significant results, it is interesting to review the findings to understand these end user perspectives.

Volume of Deliveries

These four Logistics Operators had each delivered up to 35 pallets and up to 14 parcels per day into the centre of Brussels (covering postal code areas 1000, 1030 and 1040) prior to using the UCC. They were all expecting to use the UCC for 100% of these deliveries.

Benefits of using the UCC

The Logistics Operators were asked to identify whether the list of benefits of using the UCC were of 'high', 'medium' or 'low' importance for their company. The most highly rated benefit identified by the logistics operators is to 'avoid parking in the city centre'.

Highest	Avoid parking in city centre
↑	Improved volume and/or weight transported by your vehicle =
	You are able to provide a better service to the receivers =
	Reduction in transportation costs
	Time reduction in delivery for not having to enter the city centre
	Flexibility in planning due to no delivery time windows
	Improved company's image by adopting environmental friendly solutions
Lowest	You are able to provide a better service to the shippers

Table 2: Brussels UCC: End user identification of benefits of using the UCC listed from highest to lowest importance.

Each Logistics Operator was asked to rate the importance of each benefit from 1 (most important) to 8 (least important). This shows slightly different results. The benefits were identified as:

Most important	Reduction in transportation costs
↑	Improved volume and/or weight transported by your vehicle
	Avoid parking in city centre
	Improved company's image by adopting environmental friendly solutions
	Time reduction in delivery for not having to enter the city centre =
	You are able to provide a better service to the receivers
	Flexibility in planning due to no delivery time windows
Least important	You are able to provide a better service to the shippers

Table 3: Brussels UCC: End user rating of benefit of using the UCC listed from most to least important

Operational Costs of using the UCC

The survey for the Logistics Operators was completed in advance of their use of the UCC. The Logistics Operators expected most of their operational costs to reduce as a result of using the UCC. The only cost they expected to increase was the actual fee of using the UCC. This is shown on the diagram below.

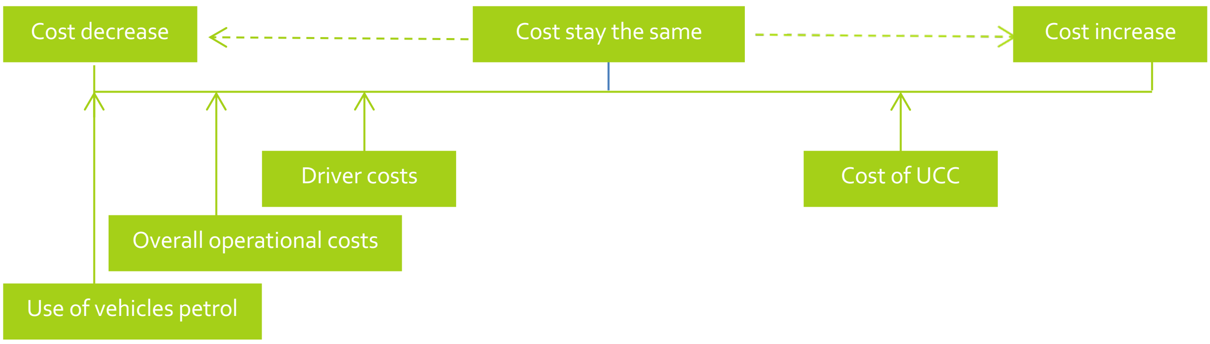


Figure 6: Brussels UCC: Logistics Operators end user expectations of the impact of using the UCC on their operational costs

Of the four Logistics Operators interviewed, only one had policies on air quality; carbon footprint / emissions for which it promoted an eco-driving programme, and pollution.

Feedback was sought from Logistics Operators following their use of the UCC for six months. Whilst there are insufficient responses to include as statistically relevant, it is interesting to note that:

- Two Logistics Operators reported achieving all of the benefits of using the consolidation centre listed above.
- One Logistics Operator now using the consolidation centre for 100% of its city centre deliveries reported it had seen all operational costs reduce.
- Another Logistics Operator who was using the consolidation centre for less than 30% of its city centre deliveries had seen a reduction in all costs except petrol, which had stayed the same.

SHOPKEEPERS

19 Shopkeepers covering a range of retailers including bike, furniture and infant care shops, took part in an interview to judge the benefits of using the UCC, the volume and quality of deliveries received, and the amount of space used in the shop for storage of goods and waste.

Three (of a total 19) shops were actively involved with Brussels UCC, called 'Active'. 16 shops had no existing arrangements with the UCC, called 'Passive'. Again, whilst this figure is too low to provide statistically significant results, it is interesting to review the findings to understand these end user perspectives. Specific feedback from the different shops is reported in Appendix 3. The results are summarised below, with quotes provided from shopkeepers where relevant.

Benefits of using the UCC

When asked what was important to them within the context of an Urban Consolidation Centre, the shopkeepers responded that the following were either 'very important' or 'important':

Benefit of Using Urban Consolidation Centre	Number of shops	Percentage of shops
fewer/better coordinated deliveries	7	44%
more reliable deliveries	6	38%
off-site storage	5	31%
packaging waste removal	5	31%
removal of packages	4	25%
possibility to choose delivery time slot	3	19%

Table 4: Brussels UCC: Percentage of end users identifying benefits of using UCC as 'very important' or 'important'.

The (potential) benefits of using the UCC were different between each of the shopkeepers, depending upon the type of store, previously knowledge of CityDepot, the need for storage, whether the store had a central warehouse, the number of deliveries received per week.

"Collaborating with CityDepot offers me a solution for storage because my shop is small and a bike takes up a lot of room but this is also good to work on a societal gain because I don't find it pleasant to get so many deliveries in front of my door in a little street" Shopkeeper

Volume and Quality of Deliveries Received

The shops regularly received deliveries from between 1 – 6 different carriers, with most receiving either 2 or 3 deliveries per week.

All shops received less than five deliveries per week, and spent very little time waiting for deliveries (under 5 minutes). Most of the deliveries were made during opening hours, with only a furniture store and handyman receiving deliveries before opening hours. Deliveries are received mostly on time, and mostly match the orders placed.

Five 'passive' shops received deliveries from the consolidation centre. Each of these shops has seen a small reduction in the time taken spent waiting for deliveries, and three of these shops have seen an improvement in deliveries being made on time.

Shop Storage Space

In relation to how much space is allocated within the store for the storage of goods and waste, the following responses were provided:

Goods Storage space m^2	No of shops
<2	2
2 to 5	1
5 to 10	1
>10	8

Waste Storage space m^2	No of shops
<2	7
2 to 5	3
5 to 10	2
>10	3

Table 5: Brussels UCC: Space allocated to storage of **goods** and **waste** in end user shops.

"CityDepot is great solution to storage problems. This is also a solution to get deliveries later, during opening time of the shop. Receive pallets there and keep them." Shopkeeper

4.4 Findings

1. Logistics Operators chose to use the UCC to avoid having to enter the city centre, to reduce transportation costs, and to improve the volume and / or weight they were able to transport. Whilst they saw the benefits of improving their environmental reputation, and in improving customer service, it appears their decisions are more driven by operational cost.

2. The majority of Logistics Operators interviewed did not have environmental policies in place.

3. The Shopkeeper perspectives were diverse, with no one benefit commonly seen as most important. Perspectives appear to be different for different types of retailers, those who had previously knowledge or experience of CityDepot consolidation centre operations, those with central warehousing functions, those with specific storage requirements, and those with different numbers of weekly deliveries.

4. Each Shopkeeper received only a handful (less than five) deliveries per week, and some Shopkeepers did not see how the extra charge for use of the UCC would be cost effective, given that most of the deliveries were made during opening hours when shopkeepers were at their store anyway, and the time taken to receive deliveries was minimal.

5. The space within shops allocated to storage of goods and/or waste did not appear to be an indicator of whether the Shopkeepers would be interested in the value added services offered by the UCC. There were specific reasons for individual Shopkeepers' interest in the value added services. Many Shopkeepers expressed an interested in the removal of parcels by the UCC, as this service was considered good value for money in comparison to other providers.

6. For some Shopkeepers receiving deliveries from the consolidation centre, it was difficult for them to identify and evaluate CityDepot's consolidated deliveries separately from their other deliveries.

7. In general, the larger the business:

    d. the less they required a consolidation service to organize their deliveries since they organize this themselves,

    e. the less they needed a waste packaging removal service, since they already had a contract with a waste enterprise and / a container,

    f. the less they needed storage facilities, since they already had these.

8. Many Shopkeepers are used to their current delivery arrangements, which although may not be ideal, are familiar and 'work' for the shops. One of the furniture Shopkeepers interviewed explained he receives deliveries at home or through his neighbours and says this arrangement 'is perfect'. Clearly articulating costs and benefits of last mile logistics solutions, which helps in the identification and agreement of the 'problem' , is therefore the first step required in a behaviour change programme.

5.0 End User Perspectives: Recommendations

Recommendations have been drawn from the findings of the end user assessments above. Action has been identified in relation to each recommendation, for the key stakeholders Policy Maker, Logistics Operator and End User.

Recommendation	Action
1. Involve end users at an early stage in the design and implementation of last mile logistics solutions to build ownership and understanding of the benefits and costs associated. Install End User Champions to encourage more reluctant end users to adopt last mile solutions, and get involved.	Policy Maker End User
2. Seek to enter into agreements / contracts with end users in the early stages of last mile logistics solutions development and implementation to ensure solution is utilised, where relevant.	Logistics Operator
3. Develop last mile logistics solutions for end users that are within a large organisation, or part of a wider business group, that is supportive of initiatives to minimise the impact of urban delivery and servicing activity.	Policy Maker Logistics Operator End User
4. 'Lead the Way'. Stakeholders can wear many 'hats'. A policy maker is also an end user. As such the policy maker can lead the way to design and implement their own last mile logistics solution, providing political support to specific actions and engage with other key stakeholders to effect change. Logistics Operators and businesses can proactively change their last mile logistics arrangements.	Policy Maker Logistics Operator End User
5. Provide clear cost and benefits to end users to enable them to make decisions about participating in last mile logistics solutions.	Policy Maker
6. Ensure specific knowledge of potential end user requirements for value added services to accurately inform any business plan. Do not assume end users will want or need value added services on offer.	Policy Maker Logistics Operator
7. Initiate a behaviour change programme to encourage end users to develop more sustainable procurement and sustainable transport policies and practices.	Policy Maker End User
8. Engage with a range of end users through business groups such as Business Improvement Districts. Encourage business groups to include air quality management and last mile logistics within their remit.	Policy Maker
9. Encourage all businesses to adopt environmental policies as part of wider Corporate Social Responsibility agendas to improve recognition of their efforts to minimise air pollution and traffic congestion.	Policy Maker Logistics Operator End User
10. Gather and communicate the experiences of end users in last mile logistics solutions, as part of a wider behaviour change programme. Share these experiences locally, sub-regionally, nationally, and across Europe to encourage knowledge transfer.	Policy Makers

CROSS RIVER PARTNERSHIP

LAMILO sustainable city logistics

Appendix 1:
Methodologies for establishing the End User Perspectives

Cleaner Air Better Business Programme

The end user assessment for CABB was carried out between December 2014 and March 2015.

A survey was designed to covers the findings, in relation to:-

- **AWARENESS:** Provide a clear picture of the current levels of awareness within BIDs and BID member organisations relating to air quality issues
- **CAPACITY:** Identify capacity of BIDs to act to rising air quality levels
- **ACTIVITIES AND INTERVENTIONS:** Highlight existing mitigation activities in CABB's delivery areas.

The aim of the survey was to provide an accurate and reliable picture of existing 'practice'.

The survey was carried by out in two parts:-

- An on-line questionnaire
- Follow-up telephone survey of selected respondents

Copies of these surveys can be found at Appendix 4.

The survey was open between 15th December and 9th March (11 weeks) during which 113 responses were received. The response rate was lower than anticipated based upon the potential number of businesses with the BIDs, and perhaps a reflection of the lack of engagement by businesses in relation to these issues.

London Boroughs Consolidation Centre

The end user assessment for the LBCC was conducted during the summer 2014.

The purpose of the assessment was to inform the overall assessment of the LBCC within the LaMiLo project, and to provide business case evidence for a potential permanent adoption of the Consolidation Centre by London Borough of Camden.

CRP and London Borough of Camden developed an online questionnaire for the end users, to provide information in relation to the below for assessment:

a. **benefits** of using the UCC and their relevance to the requisitioners:

- Reliability of deliveries
- Quality of deliveries and customer service
- Environmental benefits
- Safety of deliveries

- Efficiency of deliveries

b. the **quality** of deliveries:

- reliability
- accuracy
- cost effectiveness
- customer service
- coordination/efficiency

c. **behaviour change**

Brussels Urban Consolidation Centre

The end user assessment for Brussels UCC ran from April 2014 to June 2015.

CRP and Brussels Mobility developed a questionnaire to be conducted face to face with each end user group, to provide information in relation to the below for the end user assessment:

1) **For the Logistics Operators:**
   a) Current (and post-UCC) **volume** of deliveries of pallets and parcels per day in Brussels Region/within target area/via the UCC, to understand the scale of operations and future changes.

   b) the **benefits** of using the UCC including:
      - Improved company's image
      - Flexibility in planning
      - Time reduction in delivery
      - Reduction in transportation costs
      - Improved service to the shippers/receivers
      - Improved volume and/or weight transported
      - Avoid parking in city centre

   c) the changes to **operational costs** of using the UCC
      - Overall operational costs
      - Drivers costs
      - Use of Vehicles
      - Petrol
      - Cost of UCC

2) **For the Shopkeepers:**
   a) the **benefits** of using the UCC including:
      - More reliable deliveries
      - Fewer deliveries/better coordinated deliveries

- Ability to choose your delivery slot
- Delivery time closer to opening time
- Off-site storage facility
- Packaging waste removal
- Removal of packages

b) Current (and post-UCC) **quality** of deliveries:
   - reliability, accuracy, cost effectiveness, coordination, customer service

c) Current (and post-UCC) **volume** of deliveries per week

CityDepot conducted the face to face interviews with the Logistics Operators between November 2014 and January 2015, and with the shopkeepers between May and June 2015. English language translations were provided to CRP and Brussels Mobility.

Appendix 2: Camden's London Boroughs Consolidation Centre: Quotes from end users

Three of the questions used for the LBCC survey prompted for additional comments. Selections of these comments are provided below.

Have you noticed any differences since the start of the trial now your goods are delivered via the consolidation centre instead of being delivered via the supplier?
We are ordering less goods then before anyway, but overall I haven't noticed much difference.
As we are in C&E the stationary deliveries have been cut to set times for delivery. Monday, Wednesdays, Fridays. The only difference I have seen is if our customers want a request urgently and we cannot get on the next day. Other than that it has not been too bad.
Less waiting time for delivery to arrive.
Banner orders used to be delivered the next day; however we now have to wait a little longer.
Previously the goods would be delivered to the office in which I work in on the first floor which was great. They are now delivered downstairs to our stores. Due to health and safety I am unable to carry the deliveries upstairs myself and often have to wait for someone in stores to bring them up to me when they are not busy. This can often result in delays as they are very busy.
With the supplier you have the next day delivery but with the consolidation 3 to 4 working days or longer.
If I am honest I have not noticed a difference directly but do appreciate that this way of delivery has a beneficial benefit to Enfield.
Didn't even know they were going through another centre.
Before the consolidation, most of the time when stationery was ordered from office depot it would normally come the next day or two but now we have a set day for delivery - I suppose it means that there is more time to get all the stationery items together.
I have seen no difference.
Delivery date is more accurate.
Speed of delivery and customer service has improved.
Items are generally delivered to a main reception point, collected by this department when it is convenient.
The items ordered, though required are often not an emergency and with a bit of forward planning, items can be ordered to suit both delivery and requirement times.
Seems the same as usual.
Not really made a great difference other than knowing which day to expect delivery.
It appears that items are being delivered in a better way and the timescale is good.
I haven't noticed any difference. Stuff turns up at reception and we open the boxes and tick the items off to check they match order. I wouldn't really know how it got here.
Before goods where delivered as soon as they were ordered now there are fixed delivery days.

Have you changed your purchasing behaviour since the trial?
We still just order like we normally do, as the items will just take a little longer if we are not doing it for the Monday and Wednesday delivery.
Staff are aware of the changes in the way we order now and have adjusted to it. As they have become aware there is not that demand to receive order now, but later. We place large order for essential things i.e. paper ink etc.

I order larger quantities now and order earlier than I used to due to the time taken to get deliveries.
I order more quantities now than before to avoid shortages.
Due to lack of storage space I order approximately the same amount that I ordered previously.
I try to place all orders on the same day.
I tend to wait for ordering and order more items.
I had always watched the way I purchased my items, and ordered what I needed in one sufficient month rather than spending again and again more than once in each month. This trial has also made me remember cost efficiency and how to use it effectively.
I haven't changed my purchasing behaviour, I still order as normal from Office Depot and Greenhams and am satisfied with the delivery.
We now do an order once a fortnight instead of as and when and then make sure we order larger quantities, usually toners.
It makes life simpler though doing so makes it harder to find storage space.
I have always arranged purchasing to minimise number of deliveries / reduce delivery charges.
I did not know there was a trial.
I tend to wait for more items to order so that the order is a bulk order.

Would you support the consolidation centre to include more of your suppliers of goods and to continue on a long term basis?
I don't believe I was aware of the change to the way things are delivered and as I do not order a lot of supplies I have not noticed any changes in delivery times.
I haven't done many stationery ordering since the consolidation began to notice if a difference was made.
I am not against the idea in principle but there would need to be better information between suppliers and the courier.
Any initiative to cut cost and reduce our carbon footprint is a worthy one, even if we have to wait a few days longer for items.
Of course if it makes the process more efficient and saves money and time.

Do you have any further comments or recommendations about the London Boroughs Consolidation Centre project?
Is there any way the good could be delivered to the office people are based as opposed to our stores?
The idea of delivering on a specific day(s) in a week has its advantages as the purpose of the trial is to reduce the impact of pollution by noise, gas emission and congestion in the environment so I will support that this should be promoted. We have to change our attitude to maintaining our stocks of items so that we don't run out completely and have to wait for delivery to be done urgently. Overall, I think it's a good idea.
Very good system that should be continued.
Raise the minimum order threshold to further reduce the number of deliveries.
You should try and get other London Boroughs involved.

Appendix 3: Brussels' Urban Consolidation Centre: Responses from Shopkeeper End Users

Feedback from the 19 Shopkeepers interviewed as part of the end user assessment is provided in summary below. Whilst this cannot be considered a representative sample of shopkeepers, the feedback does provide interesting initial reactions to the Brussels Urban Consolidation Centre during its first few months of operation.

Urban bike store – 'Active'

"Collaborating with CityDepot offers me a solution for storage because my shop is small and a bike takes up a lot of room but this is also good to work on a societal gain because I don't find it pleasant to get so many deliveries in front of my door in a little street.

What's more I want to get rid of paper/cardboard and send packages. CityDepot provides very attractive prices. They send important volumes, get themselves interesting prices by parcel carriers and give back a part of the gain to their clients."

The shop expected the UDC to benefit them from consolidated deliveries, off-site storage, with the possibility of waste disposal, and removal of packages. The benefits of using the UDC in relation to the actual deliveries – reliability and choosing time slots were not considered important by the shop.

Before using the UDC, the shop received between 2-5 deliveries per week from 3 transporters. After signing up with the UDC the shop received two deliveries per week:

"We have agreed timeslot for deliveries on Tuesday and Friday with CityDepot."

Before consolidation, the shop devoted between 5-10 m^2 to the storage of goods. After consolidation this has decreased to less than $2m^2$. There has been no change in the amount of space dedicated to clean waste at the store, less than $2m^2$.

The shop expresses an increase in satisfaction with the level of customer service in relation to the delivery of goods from 'satisfied' before consolidation, to 'very satisfied' after consolidation.

There has been no change the in time of day the shop receives deliveries from before to after consolidation, but there has been an improvement in the reliability of deliveries.

Case Study: Design / Gift Shop – 'Passive'

"Enthusiastic over an initiative such as CityDepot. Would like to use a service such as the consolidated delivery, however the turnover is very limited and thus not sufficient to pay for a service like that. Sending packages through CityDepot is used. And if the future allows it, storage will also be used."

Of the UCC selling points, only the removal of packages is seen as useful, all the other elements are not seen as important.

The shop is very happy with its current delivery arrangements:
"We are used to it and the current logistics service providers deliver the shop for free."

Three different providers each make 2-5 deliveries per week to the shop during opening hours. No time is spent receiving deliveries since the shopkeeper is there anyway.

There is 20m^2 space allocated to the storage of goods at the shop.

Case Study: Bike Sales and Repair Shop – 'Passive'

"We have several logistics service providers and organized in order to receive deliveries only when it suits us. As regards timeslots as well as material (not to overload our stock)."

The shop does not consider any of the UCC selling points as important.

It receives deliveries once a week from three logistics operators.

The shop has minimal space for storage of either goods or waste:

" We order goods only when a client buy it so we don't need offsite storage facility. Or if we take something from our (minimal) – stock, we reorder it ASAP in order to keep only the minimum in the shop. The waste we cope with is very specific: metal is taken for free by a scrap metal merchant, tires go to SHANKS who recycle them (no idea what they do exactly), our clients take inner tube back.

No Webshop yet but we plan to create one later. The e-logistics of CityDepot would then be a brilliant advantage!"

Case Study: Furniture Shop – 'Passive'

The store receives deliveries from several logistics service providers between 2-5 deliveries a week.

"Some of them deliver to us at our central warehouse (for several shops). Little deliveries happen sometimes at the shop with transpallet because we aren't easily accessible given our location in the Royal Gallery.

The "transport broker" service of CityDepot is very interesting for us. We can meet the needs of our clients this way and deliver pieces of furniture in the whole Europe. This is good to have a single point of contact who can take care of it.

The combination of several services such as deliveries and packaging waste removal is very convenient. However we remove packaging in our central warehouse (not in the shop in the Galerie du Roi)."

The shop is very happy with the status quo, does not find any of the 'selling points' of the UCC important. It receives current deliveries during opening times, and spends very little time on receiving deliveries. Since they have a central warehouse facility, there is very little space dedicated to storage at the shop for either goods or waste, in both cases under 2 m^2.

Case Study: Baby and Infant Shop – 'Passive'

This shop has a particular interest in the removal of packages at store via CityDepot at an attractive price well as the overall ecological impact. It does not view the other UCC 'selling points' as important. They are currently satisfied with the delivery services that they receive, with deliveries being made during opening hours. They have between 2-5m^2 space allocated for storage of goods on site and less than 2m^2 space allocated for storage of waste.

Case Study: Textile shop – 'Passive'

This shop is most interested in few deliveries /better consolidation of deliveries, and the removal of waste packaging. It does not consider the other 'selling points' of UCC important. It is generally happy with its current delivery arrangements receiving on average one package a week, from three logistics providers, just before opening times.

"Together with CityDepot we are discussing to find the best financial arrangement in Brussels with on the one hand comfort delivery and on the other hand removal of packaging waste. Thanks to the collaboration with CityDepot Hasselt we're willing to extend the collaboration to Brussels, which starts with the shops with the following postcodes: 1000, 1030 and 1040."

Case Study: Souvenir Shop – 'Passive'

"A part of the deliveries is done by ourselves with the car. We receive deliveries from a logistics service provider only from time to time. CityDepot is interesting to do deliveries between one central warehouse and shops in the city centre because we are part of a group."

This shop is interested in fewer deliveries / consolidated deliveries. It is happy with its current delivery arrangements, and has no storage on site.

Case Study: Furniture Design Shop – 'Active'

"This is difficult because we don't have an important stock. Big pieces are hard to deliver. Lack of space is an important problem. Another important problem is that my turnover doesn't allow me lot of extras. Collaboration with CityDepot to deliver my pieces of furniture within the Region of Brussels is thus a perfect solution. Thanks to their high frequency in the city centre, they take my furniture on the way and offer me interesting prices."

This shop is interested in the off–site storage offered by the UCC. Before using the UCC the shop dedicated 5-10m^2 of space to the storage of goods. It pays €100 per quarter for removal of waste packaging from outside its store, which happens on a Sunday. The shop does have an online presence and is charged €7 for all deliveries in Belgium. The store has started to work with CityDepot for deliveries within Brussels region.

This shop is happy with its current delivery arrangements, receiving deliveries from multiple delivery providers between 2-5 times per week, during opening hours.

Case Study: Live Nation – 'Active'

"CityDepot is great solution to storage problems. This is also a solution to get deliveries later, during opening time of the shop. Receive pallets there and keep them."

This shop expects all the benefits of the UCC, and only finds the removal of packages as not important.

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Case Study: Furniture Shop – 'Passive'

"We're part of a "chain" so we receive our deliveries consolidated from the headquarters. What interests us is the removal of packaging waste, which is a big problem when you receive big items in the city centre."

Of all the selling points of the UCC, it is only the removal of waste that this shop is interested in.

They are very happy with their current delivery arrangements and receive between 2-5 deliveries per week consolidated from their headquarters.

The shop has over 10m² for the storage of goods, and over 10m² for the storage of waste.

Case Study: Tea Shop – 'Passive'

"Two producers deliver by plane. Pickup by van at airport. Some arrivals by post packages. All my goods arrive from China.

Because of small amount deliveries, I'm only interested in stock service of CityDepot because of expensive and rare square meters at Rue Dansaert. Stock @ CityDepot means no longer stock at different places. So it is very efficient for me."

All of the other UCC selling points are not interesting to the shop.

This shop receives very few deliveries – a handful per year, receiving deliveries only during tea season in China.

Case Study: Vintage Furniture – 'Passive'

"Deliveries are made by carriers or at home and do the last part myself. I don't cope with many difficulties. My neighbours sometimes receive goods for me or I manage to get appointments with carriers. I work with only one logistics service provider because this is the only one who accept to make precise appointments."

This shop is interested in most of the selling points of the UCC, but does not find the removal of waste packaging or removal of packages as important to them.

The shop is extremely satisfied with the current delivery arrangements receiving deliveries once a week from three logistics operators.

"We love the concept but are not ready to pay for deliveries."

Deliveries are made during shop opening times:
"I never have to wait because I'm always in the shop and have things to do."

This shop has 36m² of space allocated to storage of goods:

"We would like to use storage facility to get more storage and restoration possibilities. CityDepot offers is great but I don't have enough turnover to afford it!"

Case Study: Bookshop – 'Passive'

The bookshop is interested in the following service to further develop their activity: delivery of pallets in the Brussels Region, sending of parcels and removal of packaging waste. The bookshop works already with CityDepot in Hasselt and is enthusiastic over this solution.

Of the selling points of the UCC, the bookshop was interested in the ability to choose own timeslot, as well as the removal of waste packaging and removal of packages. All other selling points were not considered important by the shop.

The shop is very happy with the current delivery arrangements.

Case Study: Hardware Store – 'Passive'

Of the selling points of the UCC, the hardware store viewed more reliable deliveries and fewer deliveries/better coordinated deliveries as very important. All other selling points were not considered important by the shop.

The shop is satisfied with the current delivery arrangements. It receives over 10 deliveries a week from multiple transporters including deliveries from CityDepot via the consolidation center. It spends on average 5-15 minutes waiting and collecting its non-consolidated deliveries, and spent 0-5 minutes waiting and collecting its consolidated deliveries. It receives all deliveries during opening hours. Consolidated deliveries are always received on time, whilst other deliveries are received on time most of the time.

Case Study: Pet Shop – 'Passive'

Of the selling points of the UCC, the pet shop only viewed more reliable deliveries as very important. All other selling points were not considered important by the shop.

The shop is extremely satisfied with the current delivery arrangements. It receives over 10 deliveries a week from multiple transporters including deliveries from CityDepot via the consolidation center. It spends the same spent 0-5 minutes waiting and collecting its non-consolidated and consolidated deliveries. It receives all deliveries during opening hours.

The shop is happy with the quality of all its deliveries.

Case Study: Coffee Shop – 'Passive'

The coffee shop does not view any of the selling points of the UCC as important.

The shop receives deliveries from both CityDepot via the consolidation center, and other transporters. It is slightly more satisfied with the deliveries and level of customer service provided by CityDepot. It receives 2-5 deliveries a week from multiple transporters including deliveries from CityDepot via the consolidation center. It spends on average 5-15 minutes waiting and collecting its non-consolidated deliveries, and spent 0-5 minutes waiting and collecting its consolidated deliveries. It receives all deliveries during opening hours.

The shop is happy with the quality of all its deliveries, all deliveries are made on time and match the orders placed.

Case Study: Stationers – ' Passive'

Of the selling points of the UCC, the stationers only viewed more reliable deliveries as very important. All other selling points were not considered important by the shop.

The shop receives deliveries from both CityDepot via the consolidation center, and other transporters. It is more satisfied with the deliveries and level of customer service provided by CityDepot. It receives over 10 deliveries a week from multiple transporters including deliveries from CityDepot via the consolidation center. It spends on average 15-30 minutes waiting and collecting its non-consolidated deliveries, and spent 0-5 minutes waiting and collecting its consolidated deliveries. It receives all deliveries during opening hours.

The shop always receives its consolidated deliveries on time, whereas non-consolidated deliveries are received on time most of the time. Consolidated deliveries always match the orders placed, whereas non-consolidated deliveries match the orders placed most of the time.

Case Study: Hotel – 'Passive'

Of the selling points of the UCC, the hotel viewed more reliable deliveries, fewer deliveries/better coordinated deliveries and ability to choose its own delivery slot as important or very important. All other selling points were not considered important by the shop.

The hotel receives deliveries from both CityDepot via the consolidation center, and other transporters. It receives up to 10 deliveries a week from multiple transporters including deliveries from CityDepot via the consolidation center. It is more satisfied with the deliveries and level of customer service provided by CityDepot. It spends on average 5-15 minutes waiting and collecting its non-consolidated deliveries, and spent 0-5 minutes waiting and collecting its consolidated deliveries. It receives all deliveries during opening hours.

The hotel always receives its consolidated deliveries on time, whereas non-consolidated deliveries are received on time most of the time. Consolidated deliveries always match the orders placed, whereas non-consolidated deliveries match the orders placed most of the time.

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Appendix 4a: Clean Air Better Business: Survey of Businesses

The Cross River Partnership (CRP) and local Business Improvement Districts (BIDs) are about to launch the Clean Air Better Business campaign. This campaign will work with Central London organisations to help improve the health and wellbeing of employees. This will be by increasing awareness of poor air quality and potential measures to reduce its affect.

Ahead of launching this campaign we would like to understand, on behalf of your organisation, your current awareness of issues and activities being undertaken to reduce your impact on poor air quality.

In return for your time in completing the following eight minute survey we will enter your name into a prize draw to win £120 of shopping vouchers!

Please be as honest as possible when completing the survey. All the information you provide will be used to inform the Clean Air Better Business campaign. Thank you and good luck in the prize draw!

1) Please indicate which of the following you are responsible for within your organisation (please tick all that apply):

Employee health and wellbeing
Environmental policy
Transport policy
Procurement
Goods-in
None of the above

If none of the above, please pass the survey onto a colleague that has responsibility for one or more of the areas identified above. Thank you.

2) If known, please select which local Business Improvement District (BID) you are a member of:

Angel AIM BID
Baker Street Quarter Partnership
Better Bankside BID
Camden Town Unlimited BID
Heart of London
Paddington BID
South Bank Employers Group
Team London Bridge BID
The Fitzrovia Partnership BID
The Northbank BID
Vauxhall One BID
Victoria BID
Waterloo Quarter BID
Unknown

3) **Please identify which industry sector you represent:**

Accommodation, food, travel and tourism
Administrative and support services
Construction
High value business support
Health, social work, scientific R&D and veterinary service
Information, communications, arts, entertainment and recreation
Financial and insurance activities
Manufacturing
Public sector and academia
Real estate, architecture, engineering and building services
Retail (exc. motor trades)
Transport and storage
Wholesale (inc. motor trades)

4) **Please provide the following information about the organisation you represent:**

Organisation Name
Organisation Postcode

5) **Please define the size of your organisation at your specific site:**

Minute/Micro	(<10)
Small	(<50)
Medium	(<250)
Large	(<1000)
Enterprise	(>1000)
Unknown	

Sustainable Travel

6) **Please answer the following:**

Does your organisation have a travel plan?
Do you have a travel plan co-ordinator?
Would you like to know more about travel plans?
Does your organisation have a parking management plan?
Does your organisation have any policies regarding business travel?

7) **Please identify which, if any, of the following measures your organisation promotes to staff (please select all that apply):**

Active travel to work (cycling and/or walking)
Car sharing when commuting
Corporate car club membership for staff use
Cycling for travelling to business meeting

Provide electric vehicle charging point/s on site
Public transport for travelling to business meetings
Flexible working arrangements
Teleworking / home working
No personal deliveries

8) Does your company have a policy on use of taxis for business travel in central London?

9) If yes, does it contain any of the following elements:
Taxi hire in Central London is not an allowable company expense (except in unusual circumstances)
To be used when appropriate for personal safety (i.e. late night travel)
To use Hackney carriages and no other private hire vehicles
To only use for journeys above or below a certain distance
To book through a corporate taxi account
To use a low emission eco-taxi or similar if available

Deliveries & Ordering

10) Who controls the ordering of goods and services to your organisation?

You or a colleague based at your site
Head Office procurement function
Suppliers
Other (please specify)

11) Approximately, how many separate deliveries (or collections) does your site broadly receive during an average week?

1-10
11-25
26-50
51-100
101+
Unknown

12) Please confirm which types of deliveries (or collections) are made to your organisation:

Business (goods necessary for the business e.g. newspapers, stationery, document storage, furniture, laundry)
Consumables (products for own consumption e.g. water (bottled), catering/vending)
Couriers & Mail (e.g. letters, parcels, mail bags, bundles)
Personal deliveries (e.g. online shopping deliveries)
Retail (produce for sale e.g. newspapers, DVDs, toiletries, clothing, computer equipment, furniture, food, drink, toiletries, electrical items, beer/spirits etc)
Servicing (e.g. Contractors / builders, IT servicing, empty crates)
Waste / Recycling
Other

13) Are there any external factors which dictate your ability to receive goods deliveries?

Access restrictions
Delivery bay availability
Planning restrictions
Noise related delivery time restrictions

Time restrictions dictated by delivery company
Voluntary restrictions
Other (please specify)

14) A delivery and servicing plan (DSP) can help an organisation better manage the number of vehicles arriving at their site

Does your organisation have a delivery & servicing plan?
Does your business have a designated delivery & servicing plan coordinator?
Would you like to know more about freight delivery & servicing plans?
Did your organisation experience any delivery and servicing changes during the London 2012 Games period?

15) Which of the following delivery and servicing measures has your organisation adopted? This also includes any collections made to your site (e.g. by couriers).

Reducing overall number of deliveries by reducing the number of total orders
Reducing overall number of deliveries by consolidating orders with neighbouring businesses
Make use of a consolidation centre service
Moved requested deliveries to different times of the day (e.g. out of the busy morning traffic peak)
Introducing / increasing proportion of deliveries at the weekend
Requiring that deliveries are made using alternative / quieter routes
Requiring deliveries to be made using greener vehicles
No measures adopted
Other (please specify)

Fleet

16) Does your business have its own fleet of delivery vehicles (including a car-derived van)?

Yes (go to Q17)
No (go to Q23)

17) If known, please provide details of the (approximate) number of vehicles within your fleet
1-5
6-15
16-50
50+

18) Do any of your delivery vehicles use low or zero emission technologies? (tick all that are represented in your fleet):

Biodiesel (>30% blend)
Compressed Natural Gas (CNG)
Electric or plug-in hybrid
Hybrid
Hydrogen
Liquefied Natural Gas (LNG)
Liquid Petroleum Gas (LPG)

19) Considering the previous two weeks, as an example, please identify which vehicles in your fleet have been used for making deliveries in the central London area

Articulated HGV
Large rigid goods vehicle
Small rigid goods vehicle
Van
Car derived van
Car
Taxi
Motorcycle
Cargo Bicycle
Bicycle
Other please specify below:

20) During procurement of new vehicles for your own fleet, does your organisation consider any of the following factors:

Fuel efficiency
Low carbon vehicles (e.g. electric, hybrid, alternative fuels)
Low emissions technology
London congestion charge
London Low Emission Zone (LEZ)

21) Is your organisation a member of FORS (Fleet Operators Recognition Scheme)?

22) Which of the following fleet management practices have you implemented?
A fuel management plan
Driver training in safe or fuel efficient driving techniques (e.g. SAFED, SUD or similar)
An in-cab ecodriving telematics system
A fuel monitoring and performance system
A preventative maintenance programme
A driver incentive scheme for fuel efficient driving
Antiidling driver campaign

Air Quality

23) Please state whether you agree or disagree with the following sentences

Our organisation is extremely conscious of air quality issues in central London
Our organisation actively obtains information on air quality
Our organisation considers air quality to be of concern with regards to staff health and wellbeing
Our organisation is conscious of the impacts of transport on air quality
Our organisation already works towards mitigating air quality on a corporate level

24) Does your organisation...

Have an environmental policy that considers NOx, NO2, particulate emissions as well as CO2?
Have a green procurement strategy?
Use Legible London maps to identify cleaner air routes for walking & cycling?
Include air quality information on the business website?
Raise awareness of what staff can do to protect themselves from poor air quality or how they can contribute to improving air quality?

25) Does your organisation participate in any of the following schemes which relate to reducing the impact of businesses on air quality?

FORS
ECO Stars Fleet Recognition Scheme
TfL – Cycle workplaces programme
Carbon Trust
Close The Door campaign
Salix finance - for public sector & academic institutes
Low Carbon Vehicle Partnership
Air Quality Pledge certificates
Breathe Better Together
Zero Emissions Network

26) Please identify from the list below the source/s you or your organisation uses to find out information on local air quality?

Air Text
BBC Weather
CityAir App
Cleaner Air Better Health (www.cleanerairbetterhealth.eu/en/)
Clean Air For London (www.cleanerairforlondon.org.uk)
Environmental Protection UK
Greater London Authority
Healthy Air - London (http://healthyair.org.uk/london/)
London Air - Kings College London (www.londonair.org.uk/LondonAir/)
Local Borough Council
Met Office - Daily Air Quality Index (www.metoffice.gov.uk/guide/weather/air-quality)
UK-AIR website (Defra Pollution Forecast)
Do not currently look for information on air quality

Appendix 4b. Clean Air Better Business: Baseline Programme Telephone Interviews

Welcome Text	
Thank you for agreeing to participate in the next stage of the Clear Air Better Business programme. The aim of this call is to explore in a little more detail some of the questions you responded to in the recent online business survey. We would like to find out a little more information, opinion and thought to help us identify how awareness of poor air quality can be increased with businesses with a view to reducing transport related air quality emissions.	
Business Details	
Participant name:	
Company name:	
Interview Date & Time	

KEY

Blue text – prompts

Green text – advice for the interviewer

Red text – reference to results from online survey

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1) Air Quality – Information, Sources and Value		
1a) In the recent business baseline survey you indicated your organisation uses X (see Survey Q9) as an information source on current air quality levels.		
	○ Could you describe how your organisation uses this information	- *Collect & pass to staff / Advertise on intranet / Pin board / TV screen?*
	○ How is the information passed to colleagues?	- *Internal mail / Online / Bulletin board Word of mouth*
	○ Within your company, who obtains this information?	- *Colleague / outsourced?* - *Is this independently / with another company / with Council?*
1b) Does your organisation take any particular action on days when there are warnings related to poor air quality levels?		- *Send out / provide information to colleagues?*
1c) Do you think your organisation is doing all it can to make staff aware of the harmful effects poor air quality can have on health?		- *Yes / No* - *Why / Why Not?*
1d) Does your company consider air quality within your Corporate Social Responsibility agenda?		- *Yes / No* - *How do air quality considerations feature within your CSR agenda?*
2) Means of improving air quality in London – By the organisation		
Deliveries / Collections		
2a) In the recent business baseline survey you indicated your organisation receives a number of deliveries and collections each week (see Survey Q12 & Q13). Do you think anything could be done to reduce these trips?		- *Consolidation / ordering by office rather than head office?*
Delivery & Servicing Plans (DSPs) DSP questions depend on whether the company has a DSP - **Ask either 2b** (if have a DSP) **OR 2c** (if do not have a DSP) as appropriate… See response to Survey Q15A		
IF HAVE A DSP **2b)** In the survey you indicated your organisation has got a Delivery and Servicing Plan		
	○ How does the Delivery Service Plan work / operate?	-
	○ Are staff made aware of this plan?	- *Staff bulletin? / handbook? Intranet?*
	○ Why was the Delivery Service Plan developed?	- *To address delivery / servicing problems?*

IF DO NOT HAVE A DSP **2c)** In the survey you indicated your organisation does not have a Delivery & Servicing Plan. A Delivery and Servicing Plan provide a framework to improve overall safety, efficiency, reliability of deliveries to a specific location. It can also identify unnecessary journeys, help to reduce congestion and minimise overall environmental impact.	
○ Has the company ever considered developing a Delivery & Servicing Plan? ○ If not – why not?	○ *Are you aware how a DSP can help?* ○ *Has anything delayed the process?*
○ (ask if applicable) If it is being developed - why is it being introduced?	- *Problems arising?*

Fleet Fleet questions depend on whether the company operate a fleet. See response to Survey Q17. **If NO FLEET do not ask Q2d, Q2e or Q2f questions.**	
2d) Can you please provide a little more information on what you use your fleet of vehicles for and how these are controlled?	- *What these vehicles are used for?* - *Who controls them?*
2e) During procurement of vehicles how much consideration is given to the environmental impact of the vehicles?	- *Fuel efficiency* - *Use of zero or low emissions technology*
2f) From the survey we are aware your organisation has implemented X (see Survey Q23) fleet management practices, ○ Have these provide any benefits to your organisation? ○ Would you recommend these to other similar organisations?	*What benefits?* *How did they help?* *Which are considered best fleet management measures?*

Sustainable Travel Sustainable Travel questions depend on whether the company has a travel plan - **Ask either 2G** (if have a travel plan) **OR 2H** (if do not have a travel plan) as appropriate…See response to Survey Q24	
IF HAVE A Travel Plan **2g)** In the survey you indicated your organisation has a travel plan	
○ How are staff made aware of this plan?	- *Staff bulletin? / handbook? Intranet?*
○ Does your organisation have an active travel plan co-ordinator?	- *How much time do they spend on these duties?*
○ Why was the Travel Plan developed?	- *A planning requirement?* - *Company procedure / staff demand?* - *Participation in a 3rd party scheme (e.g. TfL)*
IF DO NOT HAVE A TRAVEL PLAN **2h)** In the survey you indicated your organisation does not have a travel plan	
○ Would your organisation consider introducing one?	- *Why not?* - *Do you know how a Travel Plan will help?*

○ (ask if applicable) If it is being developed why is it being introduced?	- *Problems arising?*
2i) In the recent business baseline survey it was stated your organisation promotes a range of travel measures to staff such as X (see Survey Q25) how are staff made aware of these measures?	- *bulletin board, intranet, staff handbook?*
○ Are these measures also promoted to visitors? How?	- *How to get to us guides?*
2j) A Taxi policy can help to encourage correct usage of taxi's across organisations. In the survey you indicated you *have / do not have* a taxi policy in place X (see Survey Q25) can you please provide a little more information on: ○ why a taxi policy has been introduced? / why a taxi policy has not been introduced?	- *advise staff how and when to use taxis* - *personal safety* - *not worthwhile – little taxi use?*
2k) Considering your local taxi ranks, are there any improvements that you feel could be made?	- *Well located?* - *Advertised well?* - *Clearly signposted?*

Assistant Available & Supporting Materials	
2l) Would the provision of toolkits / material / how to guides increase the capacity of your business to increase walking and cycling among staff?	- *Why Not?*
2m) Do you feel the offers to encourage uptake of walking and cycling currently available from the BID, borough or other similar organisations are readily accessible?	- *Are you aware of this information?* - *Do you know how to access the information?* - *is it easily accessible?*
2n) CABB provides free eco-driver training for taxis, PHV and freight / fleet operators – do you think eco driving training may be useful for people within your organisation who drive to or for work?	- *Purpose of eco training is to create best impact / benefit.-*

3) Means of improving air quality in London – By Government and Business organisations		
3a) With the Court of Justice for the European Union declaring in November 2014(Supreme court ruling on April 16th 2015) that the UK needs to act to reduce Nitrogen Dioxide (NO_2) levels in cities across the country and the Mayor of London proposing an Ultra-Low Emission Zone for the centre of London, what actions should be undertaken to improve air quality?		
	○ Who do you think should make these changes?	- *BIDs?/ Mayor of London / TfL / National Government* - *Other?*
	○ In your opinion what are the best ways for businesses to raise awareness of air quality issues and work towards addressing air quality?	- *Push air quality information out to each business? e.g. daily emails.* - *Promotional materials?* - *Intranet / Internet site / social media* - *Business involvement in wide-scale participation events? e.g. walk to work week* - *Participation events specific to your business?*

	○ In your opinion what are the best ways businesses can help to reduce transport emissions which contribute to poor air quality?	- *Encouraging sustainably travel:* - *Commuting / business travel / visitor travel* - *Through procurement to encourage 'greener' deliveries etc AND / OR Suppliers to use zero and low emission vehicles for deliveries*
3b) Can you name any additional activities, that you do not do already, which you think your business might be willing to do to raise awareness amongst staff when air quality is poor?		- *What would be required to get your business more active in reducing its impact on air quality?* - *Board/senior management support (or is it already there)?* - *Customer demand?* - *Regulatory or reporting requirements?*
3c) Do you think your company would invest in supporting measures to address your businesses impact on air quality further?		- *Contribution towards promotional materials for staff* - *Preparation of travel plans or delivery and servicing plans* - *Set company policies on use of greener services* - *Fuel efficient driver training*
3d) Do you think businesses would be more likely to help implement some of these measures if they were available as free or subsidised services?		

Final Thought…
Finally, would your organisation would be interested in attending a Clean Air Better Business workshop or seminar to learn more about air quality in central London, on what you can do to help and how to educate staff on poor air quality levels?

Thank you very much for your time and the information you have provided. This is the end of the interview.

Appendix 5: Clean Air Better Business: Website Addresses of Business Improvement Districts and Employers Groups

Participating BID	Website Address
Angel AIM BID	www.angel.london
Baker Street Quarter Partnership	www.bakerstreetquarter.co.uk
Better Bankside BID	www.betterbankside.co.uk
Camden Town Unlimited BID	www.camdentownunlimited.com
Heart of London	www.heartoflondonbid.london
Paddington Now BID	www.paddingtonnow.co.uk
South Bank Employers Group	www.sbeg.co.uk
Team London Bridge BID	www.teamlondonbridge.co.uk
The Fitzrovia Partnership BID	www.fitzroviapartnership.com
The Northbank BID	www.thenorthbank.london
Vauxhall One BID	www.vauxhallone.co.uk
Victoria BID	www.victoriabid.co.uk
Waterloo Quarter BID	www.waterlooquarter.org

For more information on the Clean Air Better Business programme please see:
http://crossriverpartnership.org/projects/clean-air-better-business/

Cross River Partnership is a public-private partnership that has been delivering regeneration projects in London since 1994. For more information on CRP please go to www.crossriverpartnership.org or contact crossriver@westminster.gov.uk.

Cross River Partnership would like to thank the Clean Air Better Business programme, Camden's London Borough Consolidation Centre, and Brussels' Urban Consolidation Centre for their input into this report. In particular we would like to thank all those end users who participated in the various questionnaires, surveys and interviews.

The following reports have been prepared by Cross River Partnership as part of the LaMiLo project:

- LaMiLo City Policy Review. Action 8. Output 1.
- Urban Railway Hub Freight Expansion Feasibility Study. Action 8. Output 3.
- End User Perspectives on Last Mile Logistics. Action 8. Output 4.
- Public Sector Influence on Last Mile Logistics. Action 8. Output 5.
- Lobbying Strategy for Sustainable Last Mile Logistics. Action 8. Output 6.

August 2015.