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SECTOR HIGHLIGHTS

Supply Chain

Transport Planning

Active Travel & Travel Planning

Freight Forwarding



Hannah White, Freight & Fleet Programmes Manager, Transport for London (TfL), highlighted that HGVs represent 4% of driven road miles in London and are involved in 55% of cycling fatalities

Cycling in the city:

decarbonising urban delivery and collection

Paul Davison reports back from a well-attended and engaging seminar where leading professionals discussed the latest developments and initiatives in cycle logistics.

A recent seminar in Newcastle-upon-Tyne attracted leading academics, prospective cycle delivery companies, cycling experts and local authority officers to the Great North Museum. Over 50 delegates came together and discovered the latest initiatives, research and operations in the field of urban deliveries, cycle safety and cycle logistics. The event was hosted by The Transport Operations Research Group (TORG) and funded by the Engineering and Physical Sciences Research Council (EPSRC) SECURE project. CILT's Environmental and Sustainability Forum and Cycling Forum, with the ITS UK Freight Interest Group, combined with Newcastle University to showcase some of the most recent and relevant research findings on debarbonising urban deliveries.

Guests were welcomed by Professor Margaret Bell, who introduced the series of presentations and gave an overview of the EPSRC-funded SUE2 4M project. This collaboration between the Newcastle, De Montfort, Sheffield, Leeds and Loughborough Universities focuses on measurement, modelling, mapping and management in order to create an evidence-based methodology for understanding and reducing urban carbon footprint. Margaret Bell outlined a number of quick wins for transport, including public transport interchanges, use of local shops and switching to bicycle or walking, in addition to medium and long-term solutions.



Above: Cycle safety has risen up the agenda in the UK due to the number of fatal high-profile collisions between cyclists and goods vehicles in London

Left: There is a considerable amount currently being invested in cycling infrastructure in urban areas and national parks

The morning session was introduced by Richard Armitage, Chair, CILT Cycling Forum, and focused on research and initiatives aimed at making it practical for more people to cycle, more often.

Improving the safety of cyclists

Cycle safety has risen up the agenda in the UK due in part to the number of fatal high-profile collisions between cyclists and goods vehicles in London. Efforts to resolve the issue have received political backing and financial support for associated programmes and initiatives. Crucially, these initiatives have been led

by leading companies and senior figures from the construction logistics sector.

Hannah White, Freight & Fleet Programmes Manager, Transport for London (TfL), described the Construction Logistics and Cyclist Safety (CLOCS) Programme. She highlighted that HGVs represent 4% of driven road miles in London and are involved in 55% of cycling fatalities, indicating that this is an issue that clearly needs to be addressed.

The CLOCS Programme was detailed: improving vehicle safety; addressing the safety imbalance in the construction

industry by ensuring road safety is considered as important as health and safety on site; and encouraging wider adoption of best practice across the construction logistics sector through taking best-in-class examples and developing a common national standard. The current initiatives and research underway to improve cyclist safety were discussed, including Loughborough University's Field of View research, TRL's vehicle safety technology research and AECOM's operating conditions research and recommendations.

Driver training and vulnerable road-users

It can often be difficult for non-cyclists to relate to the experience of cyclists on our roads, particularly for HGV drivers, with their elevated seating and the large dimensions of their vehicle being in stark contrast to the exposed position of those on two wheels. Many cyclists do not appreciate the difficulty HGV drivers have in seeing them and other vulnerable road-users, particularly when they are in blind spots.



The course includes a practical and theory element and is JAUPST certified to count towards the Driver Certificate of Professional Competence (CPC). The practical module allows drivers to get on bikes and get a cyclist's view of the road, which gives better understanding of blind spot areas and potential conflict that can happen between HGVs and cyclists. Mike Page reported that driver feedback to the training course has been positive and drivers have commented that they have a better understanding of vulnerable road-users.

Cycling investment and exposure to pollution

There is a concern that cyclists could be exposing themselves to increased levels of vehicle pollutants on the road network. Whilst there has been increased investment in cycling infrastructure, there has been limited research into the extent of the factors that influences cyclists (and non-cyclists) to use this infrastructure.

To explore these issues, presentations were given by Jamie O'Hare and Anil Namdeo, Newcastle University. Jamie O'Hare's presentation related to his research investigating: *Journey quality and personal factors in cycling behaviours across social groups*. There is a considerable amount currently being invested in cycling infrastructure in urban areas and national parks. The DfT National Travel Survey shows that between 2003 and 2013, there was significant growth in trips made by male cyclists, while trips by female cyclist have declined on the whole. The research project aims to explore the impact of journey quality and personal factors using quantitative research methods. It will segment across socioeconomic groups and act to inform early stage appraisal.

Anil Namdeo's presentation related to his research project: *Exposure of cyclists to air pollution*. The project provides an analysis of cyclist exposure to pollution on a commuter route in Newcastle. Data was collected on the routes using GPS and PM₁₀ monitors, which were analysed to see the difference in exposure for a number of variations, including route type (dedicated cycle path, shared road, and kerbside cycle lane) and seasonal, spatial and temporal factors.

Delivering by bike in the UK

The afternoon session was introduced by Catherine Weetman, Vice-Chair, CILT Environment & Sustainability Forum, and focused on emerging trends in cycle logistics. She looked at the experiences of successful cycle logistics operations and the possible changes in the urban environment that are needed for them to thrive. Cycle logistics is becoming increasingly common means of transport goods in many European countries and in the UK, with specialist cycle logistics firms and traditional logistics companies now using specialist cargo cycles for particular operations.

The day before the seminar, Gary Armstrong, Outspoken Delivery, a cycle delivery company operating in Cambridge and Glasgow, delivered a workshop on how to set up a cycle logistics business at the Cycle Hub in Newcastle. He opened the afternoon session with his experience of setting up and managing a cycle logistics company. The presentation included staff profile, key clients, the types of bike employed in the delivery of consignments, potential issues and the key features that make Outspoken a successful delivery company.

Richard Armitage, Founding Director, European Cycle Logistics Federation (ECLF), delivered a presentation on: *Cycle logistics across Europe*. He outlined research showing there is the potential to shift over half of motorised trips relating to goods transport to bicycle in European cities. He described the unique selling points of cycle logistics: cost effective, fast, reliable, flexible, secure, professional, environmentally friendly, local and a positive image. The ECLF had recently been represented at Eurobike 2014, the huge global cycling show. Richard Armitage had joined a panel discussion at the Eurobike Academy, where he asked the cycling industry to assist in the search for the perfect cargo bike, including such features electric assist, immobilisers and standardised parts.

Planning's role in cycle logistics

There are a number of measures that local and national government could implement to encourage and facilitate low-carbon logistics operations. The planning system plays a pivotal role in shaping our towns and cities and



Above: There is a concern that cyclists could be exposing themselves to increased levels of vehicle pollutants on the road network

Mike Page, AECOM, gave a presentation on: *Promoting the safety of vulnerable road-users* and the Safe Urban Driving Course, which is fully funded by TfL for operators registered on the Fleet Operators Recognition Scheme (FORS). The course aims to encourage HGV drivers to empathise with cyclists, be aware of the risks of the road, understand assertive cycling and outline actions to minimise risk.

Right: The optimum locations for cycle logistics and low-carbon freight operations are compact urban areas with little disparity between bike and vehicle journey time



therefore can help deliver environments conducive to the successful introduction of cycle logistics operations.

Paul Davison, Sustainable Freight & Logistics Consultant, AECOM, addressed: *Planning for zero or low-carbon deliveries in urban centres*. He described how urban areas can facilitate cycle and low-carbon deliveries, the infrastructure that can support these initiatives and how they can be delivered by sympathetic planning and urban design.

Below: Cycle logistics is becoming an increasingly common means of transport goods in many European countries, and in the UK, with specialist cycle logistics firms and traditional logistics companies now using specialist cargo cycles for particular operations

The optimum locations for cycle logistics and low-carbon freight operations are compact urban areas with little disparity between bike and vehicle journey time. There are a number of measures that can further help to improve the advantage of cycling and other low-carbon methods over other vehicles in urban areas, including traffic restrictions, traffic free zones, land for micro-distribution centres, charging points and priority lanes.



Paul Davison also highlighted that planners have a significant role to play in supporting low-carbon deliveries and that it is important to recognise that infrastructure and measures required can be distinct from general cycling.

Challenges for operators

Establishing and managing a cycle logistics operation can present significant challenges. Important factors in its success include having the right equipment, efficient approaches to deliveries and consignment integrity.

On behalf of DHL, which supported the event, Richard Armitage and Gary Armstrong gave a presentation on: *Decarbonising urban logistics: the challenge for operators*. DHL is currently operating 55 cycle logistics urban delivery routes across 40 European cities at varying levels of development. DHL uses a number of different types of cycles for deliveries, including city bikes, e-parcycles and e-tricycles.

Richard Armitage also discussed the optimum bike, which has features such as optimum storage, high security solutions, maximum load capacity without speed compromise, reliability and good-value purchase and maintenance cost.

In conclusion

The event proved to be a hugely successful day, well attended by delegates from across Europe. Each presentation elicited interesting questions and created vibrant discussion and all those who attended furthered their knowledge of cycling and cycle logistics. It is hoped that the subject will be revisited in due course to help maintain the momentum that cycle logistics has developed.

About the author

Paul Davison is Freight and Logistics Consultant, AECOM, and was awarded CILT North West Young Freight Manager of the Year in 2014.