SUBMISSION FROM THE CHARTERED INSTITUTE OF LOGISTICS AND TRANSPORT IN IRELAND TO THE NATIONAL TRANSPORT AUTHORITY'S PUBLIC CONSULTATION ON THE PROPOSED SWORDS BUS RAPID TRANSIT ROUTE

Introduction

The Chartered Institute of Logistics and Transport in Ireland ("the Institute") is the independent professional body for people engaged in logistics and all modes of transport. The Institute is part of an international body with 30,000 members worldwide. As a professional body, the Institute does not lobby on behalf of any sectoral interest, but seeks to take an independent, objective and considered view on matters of public policy.

The Institute welcomes the opportunity to respond to this public consultation.

Institute Strongly Supports BRT

The Institute strongly supports the proposed Swords Bus Rapid Transit project (Swords BRT) and welcomes the commitment of the NTA to develop this and a number of other BRT routes in the Greater Dublin Area. In 2012 the Institute published a policy brief on BRT which called for a fundamental rethink on the potential of bus-based transit solutions for Ireland's major urban areas. It has also organised three seminars to increase understanding and knowledge of the BRT concept, to consider potential applications in Ireland and to learn from the extensive experience of cities which have implemented BRT. The Institute will continue to do everything it can to support and promote the development of BRT in Ireland and the comments which we make below should be considered in that context.

Importance of a Holistic Approach to BRT Design

The focus of the current public consultation is primarily on the proposed route and the physical infrastructure underpinning the project. While this is of critical importance to the success of the project, it is also necessary to have a more holistic view, providing a clear understanding of all the elements of the proposed Swords BRT and how they interact. This includes an exposition of the policy context which underpins the project, greater detail on the expected medium and longer term travel demand and how the project will serve that evolving demand, a fleshing out of the bus services which it is planned to provide on the route, how existing conventional bus services will be modified and how they will interact with the core BRT services. It

will also be important to understand in more detail the traffic management arrangements which will ensure that BRT services benefit from the optimum priority. We strongly urge that these issues are addressed when the project comes to its statutory approval stage; a failure adequately to do could undermine support for the project.

We reiterate the point we made in our submission to your earlier consultation that it would be very helpful if the NTA published a short statement outlining its high level policy on BRT, explaining how it sees BRT fitting into the overall public transport network for the Greater Dublin Area and, most importantly, setting out some of the key technical and performance criteria it proposes to adopt. This would provide a benchmark against which the Authority itself and the wider public could assess specific BRT projects.

The Proposed Route

The Institute broadly supports the proposed route of Swords BRT but wishes to offer the following observations which should be addressed as the planning and design of the project proceeds:

- We strongly urge that, wherever possible, the centre of the road should be used for Swords BRT. Using lanes adjacent to the footpath risks BRT buses being delayed by left turning traffic, parking traffic, vehicles making pickups or vehicles partly parked on the footpath but partly blocking the bus lane. It is also unlikely that the current general driver culture will give BRT buses as much respect as is given to trams since drivers know that a bus can move out of a bus lane to get by while a tram cannot. The current proposals envisage very limited central lane running and we urge the NTA to continue to seek out opportunities to increase this as planning and design proceeds. The more centre lane running that is achieved, the more effective the Swords BRT will be.
- The interaction between BRT stations and conventional bus stops should be carefully assessed. There appear to be a number of locations between the city centre and Whitehall, both inbound and outbound, where conventional stops may interfere with BRT stations.
- The traffic management arrangements in the city centre are of major importance to the success of the Swords BRT. As currently proposed, there appears to be significant sharing of road space by BRT vehicles and general traffic between North Frederick Street and Earlsfort Terrace which could result in significant delays, increase journey times and reduce journey time reliability for BRT services.
- The interface between BRT, Luas and conventional bus services in the O'Connell Street/Westmoreland Street/D'Olier Street area should be

considered in an integrated way and a traffic management plan prepared which effectively addresses the competing demands. Decisions should be made on the basis of the level of travel demand served by each public transport mode rather than on the basis of a pre-determined modal hierarchy. The Institute is conscious that this central area is used by a wide range of bus services accessing many parts of the city and it will therefore be important to ensure that priority for the Swords BRT (and indeed Luas CrossCity) is not at the expense of bus services to the rest of the city.

- Interchange between BRT and other public transport services should be as effective as possible. Transfer distances between stations/stops should be minimised and the routes to be taken should be as direct and legible as possible (examples of good signposting and footpath markings at interchange points in Barcelona were shown in a presentation to a recent CILT/Engineers Ireland seminar). To improve interchange, would it, for example, be possible to move the BRT station serving Pearse railway station into Westland Row and to provide a southbound BRT station on Lower O'Connell Street to facilitate interchange with the Luas Red Line on Lower Abbey Street?
- Left turning at junctions can be a constraint, for example the inbound left turn at Collins Avenue.

Interaction between BRT and other Bus Services

It will be important to provide a clear understanding as to how BRT services will interact with other bus services on the Swords BRT corridor. This has a number of dimensions which we wish to comment on:

- How in specific terms will the existing conventional PSO bus services be modified to take account of the BRT services in the corridor?
- How will the BRT project take account of likely future developments in the public transport network? This could arise from a range of factors such as the need for interchange with future orbital bus routes or from the introduction of new routes to serve future residential or commercial development.
- It appears that the Swords BRT route will be used by other bus services, including Dublin Bus, Bus Eireann and a number of private bus services. The Institute supports this approach but it will be necessary to clearly outline how this will be accomplished in practice given the large variety of services and stopping patterns involved. We note that it is proposed to set back conventional bus stops along the BRT corridor. This is welcome and will undoubtedly help but will it be enough to ensure that the full range of other bus services using the corridor will not interfere with BRT bus services? It appears that the setback stops will only accommodate a single bus. This may not be sufficient in certain circumstances or at certain times and could result

in buses obstructing BRT services as they wait to access a conventional bus stop.

- How will priority at traffic lights work in practice? Will priority simply be accorded to the first bus to arrive or will it be triggered only by BRT buses? How this question is answered will have consequences for the speed and reliability of BRT services.

Taxi Access to Swords BRT Corridor

It is not clear if taxis will be allowed to use the Swords BRT corridor. It is a particularly important issue on this corridor given the volume of taxi accessing Dublin Airport. The NTA needs to provide a full assessment of this issue. The Institute favours permitting taxis to use the corridor unless the analysis clearly demonstrates that this would have a seriously unacceptable effect on the operation of BRT. If taxis cannot be accommodated, it will be necessary to outline what alternative arrangements are proposed.

Interaction between BRT and Cyclists/Pedestrians

The proposals for the Swords BRT corridor include significant provision for cyclists which the Institute broadly supports. However there are some issues of concern:

- Unlike ordinary bus lanes, it is likely to be inappropriate for cyclists to share the same road space with buses in the core BRT corridor, particularly where bus speeds will be high.
- There appear to be some instances where cyclists will share footpath space with pedestrians. Unless there is a physical segregation of cyclists there is a real risk that this will compromise pedestrian safety. Simply using markings to delineate exclusive space for both cyclists and pedestrians is unlikely to be enough. Experience of existing facilities which share space, such as the Clontarf-Sutton coastal pathway, demonstrate that this can create problems for pedestrians because of the speeds at which cyclists travel and the encroachment of cyclists into pedestrian space and vice versa. There is also an increasing problem of cyclists riding on ordinary footpaths and the introduction of shared facilities might reinforce the mistaken impression that this is a lawful and acceptable practice.
- In some locations it is proposed to divert cycle lanes behind BRT stations. This has the potential to create safety problems for pedestrians accessing the stations. It is also proposed that cycle lanes will be located inside BRT lanes, requiring buses to cross the cycle lanes to access BRT stations. This also has safety implications, this time for cyclists. While these arrangements may be unavoidable in many circumstances, they should be avoided wherever

possible. It will also be important to undertake a safety education and promotion campaign aimed at all three categories of road user and to provide appropriate signing and marking to alert them to the dangers.

Operational Issues

There are a number of operational issues on which the Institute would like to comment:

- The Institute strongly supports the proposal to operate direct BRT services to/from Dublin Airport as well as to Swords. The direct services to and from Dublin Airport will be of benefit to two distinct travel segments – air travellers, meeters and greeters on the one hand and also people working in the Airport zone. The distinct travel needs of each segment should be assessed and catered for. The demand analysis should also be used to assess how best to meet the travel needs of the likely significant number of people wishing to access the Airport from Swords, particularly as many airport employees live in the area.
- The proposal that all ticketing on BRT services will be off-bus is most welcome and strongly supported by the Institute. However it is not clear if users of Leap cards will be able to tag on/tag off (as for rail and Luas) or will have to interact with the driver (as on conventional Dublin Bus services). The Institute firmly favours the former and strongly urges the NTA to implement this approach which already works very effectively for Luas. We also reiterate our call to the NTA to introduce this approach for all bus services. The Authority is actively promoting increased use of the Leap card and using it fares policy to strongly incentivise this. Perversely the more it succeeds, the slower bus boarding times will become as more and more Leap card e-purse users will have to interact with the driver.
- It is not clear how driver changeover will be managed given that there is no bus depot on the proposed Swords BRT corridor. This may necessitate layover facilities at some point, probably in the city centre although this is not particularly desirable because of the dearth of suitable space and the risk of delays at changeover.
- We note that the NTA proposes that Dublin Bus will operate BRT services on the Swords corridor. These services have to be delivered to the very highest standards whoever the operator is and we therefore strongly recommend that they should be covered by a special contract, separate and distinct from the general public service contract for the Greater Dublin Area. This contract should contain more challenging requirements than the general PSO contract, setting down very exacting performance standards and containing particularly strong performance incentives and penalties.

Type of Bus to be used on Swords BRT

The Institute notes that it is proposed to use 18.5 metre articulated buses, with a passenger capacity of 120 and multiple doors, on the Swords BRT corridor and that station platforms will be able to cater for longer vehicles than this. The Institute broadly supports the use of high capacity vehicles and the use of multiple doors for access and egress. However we reiterate what we said in our submission to the Authority's earlier consultation that the choice of bus to be used on the BRT network should be an output of the design studies, not an input to them. The key considerations when selecting vehicles should be: capacity and quality. It is important to purchase vehicles which deliver the optimum passenger carrying capacity and passenger experience.

The Institute has no strong views on the most appropriate type of vehicle to be used on BRT routes, but urges the NTA to make its choice with great care and only following a thorough review of practical experience on other BRT systems. No amount of desk-based analysis will replace the learning experience of travelling on a bus in actual revenue service. The passenger experience should be a very important consideration, including ease of access and egress, comfort during travel and the seating/standing ratio. There is little experience of articulated buses in Dublin but anecdotal evidence suggests that the limited earlier trials produced some negative passenger reaction, especially from people who had to stand during their journeys. The ratio of seated to standing places will be a significant consideration and there is likely to be user resistance to standing over longer distances. Bus passengers tend to dislike standing more than rail passengers over a similar journey time because of the differences in ride quality.

The analysis should be guided by modelling and other data specific to the Swords BRT corridor, including information on journey patterns (length and time taken), boarding and alighting times, turnover of passengers per journey, seated/standing ratios and forecast standing times.

It is likely that the Swords BRT corridor, serving both the Airport and commuter zones, will have a large number of passengers making relatively lengthy journeys. If this is confirmed by the analysis, there will almost certainly be a need to provide for a higher proportion of seated passengers. Buses serving the Airport will also require a larger than normal capacity for luggage.

While we understand the desire to select a bus design that looks very different and possibly looks like a tram, we urge that the NTA adopts a precautionary approach. The emphasis should be on performance rather than perception. Select a vehicle that has a proven track record rather than one that looks good.

Will buses on the BRT corridor be conventionally powered or are alternative options such as hybrid, CNG or electric buses being considered?

We also repeat our previous recommendation that the NTA begin an early dialogue with the Department of Transport, Tourism and Sport about the scope for authorising buses up to 24 metres in length. In particular, consideration should be given to the use of a more flexible permit system which could authorise the use of longer buses in particular areas or on specific corridors like Swords BRT. This might be easier to achieve than a national authorisation applicable to all public roads.

Access Arrangements for Business

The NTA should give careful consideration to impact of reducing available road space for commercial traffic and to the adequacy of access arrangements for businesses located along the Swords BRT corridor, during construction and during subsequent operation.

An assessment should be made of the level of commercial traffic, the likely impact that the proposed re-allocation of road space will have for that traffic and the measures to be implemented to mitigate the adverse effects where no suitable alternative routes are available. Arrangements for effective consultation with commercial road users should be put in place at the earliest possible opportunity and throughout the planning and design process.

Shops, factories and other business premises have a range of access requirements which should be assessed and provided for. This includes access for deliveries, dispatch, servicing and customer/employee parking. Some premises do not have off-street parking facilities or rear access and appropriate arrangements will have to be made to accommodate them. Some dispatch/delivery operations (such as cash in transit, beer and pharmaceuticals) have significant health and safety or security implications and require special arrangements, for example parking in close proximity to the dispatch or delivery point. Confining deliveries to night time may be an option in some cases but this in turn may be constrained by restrictions on night time deliveries in residential areas or by the particular business model. It is critical that there is effective prior consultation during the planning and design process with businesses likely to be affected. This includes not only the businesses located along or in close proximity to the proposed Swords BRT corridor but also their logistics providers. It is important that the distinct perspectives of both parties are sought and understood.

Importance of Learning from Experience

BRT has been successfully implemented in a wide range of cities worldwide and it is most important that we continue to learn from the wealth of experience that has been assembled – not only the examples of best practice but also the mistakes that have been made. No two cities are alike and it will often be necessary to modify what

others have done to suit our circumstances. The BRT seminars which the Institute has co-hosted included presentations from a range of cities. While the topography, layout, population density and other characteristics of those cities may be different to that of Dublin, there are still lessons to be learned and applied. They can be summarised as having a clear vision of what you want to achieve and an unwavering commitment to quality, to meeting the real requirements of passengers, to achieving value for money and above all attention to detail.

Benchmarking of Swords BRT Project

The Institute recommends that the NTA consider benchmarking the Swords BRT project against best practice. A helpful comparison could, for example, be made using the BRT Scorecard developed by the Institute for Transportation and Development Policy which assesses and scores performance under a number of headings: The BRT Basics, Service Planning, Infrastructure, Stations, Communications and Access and Integration. It can be accessed at http://www.itdp.org/library/standards-and guides/the-bus-rapid-transit-standard/.

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