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## Secretariat memorandum

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Agenda item 14

LTW 255

Drafted 16.9.08

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### Consultation on articulated bus routes 38, 507 and 521

#### 1 Purpose of report

- 1.1 To seek the Board's views on proposed changes to bus routes 38, 507 and 521 which may result in the replacement of articulated by conventional buses.

#### 2 Background

- 2.1 The use of articulated (bendy) buses in London has been a source of some contention since their introduction in 2002. In 2008, Boris Johnson was elected to the Mayoralty on a manifesto which included a proposal to remove this type of bus from service in response to opposition expressed by some cyclists and other road users.
- 2.2 London TravelWatch's position has always been that buses should be accessible to all, and have sufficient capacity to cater for peak demand on the routes on which they are used. But it has taken no collective in-principle view about the use of articulated buses, and objections to them have not featured in its appeals caseload.
- 2.3 Proposed changes to bus routes and frequencies are usually dealt with by the secretariat under delegated authority (taking due account of comments received from members and other sources). But in view of the substantial change in policy that the proposals for routes 38, 507 and 521 entail, and their implications both for bus passengers and other road users, it is felt that a discussion by the Board is appropriate before a response is sent to Transport for London (TfL).

#### 3 TfL's proposals

##### 3.1 Route 38

- 3.1.1 Route 38 runs between Victoria station and Clapton Pond via Hyde Park Corner, Piccadilly, Islington and Hackney. Bendy buses operate the daytime service, whilst at night a separate service (the N38) operates using conventional double deckers covering the same route but also running on to Walthamstow.
- 3.1.2 For the new contract starting in July 2009, TfL is considering replacing the articulated buses with conventional double deck vehicles. But operators are also being asked to submit prices based on the continued use of articulated buses.

- 3.1.3 Ticket selling and checking arrangements for the double deck option are currently being considered.
- 3.1.4 The level of service provided by the double deck option would involve increasing the frequency of buses by 8 buses per hour (bph) in the morning peak (40% more), 7 bph in the evening peak (39% more), 3 bph during weekday daytimes and on Saturdays (20% more), and 2 bph in the daytime on Sundays and on weekday evenings (20% more). At peak times buses would run every 2 minutes, in the daytime every 3 minutes, in the evenings and daytime on Sundays every 5 minutes, and on Sunday evenings every 6 minutes.
- 3.1.5 The N38 would be increased in frequency from 8 to 10 buses per hour.
- 3.1.6 The 38 has a peak vehicle requirement of 47 buses (i.e. the number of vehicles in service at the busiest time). A 40% increase in frequency will require another 19 buses to be added to the schedule.
- 3.2 Route 507
  - 3.2.1 Routes 507 and 521 are the two surviving services from the network previously marketed as 'Red Arrows', which provide links (principally for commuters and shoppers) from the London termini of Victoria, Waterloo, London Bridge, City Thameslink and Cannon Street. Both run on Mondays to Fridays only, and both had evening services introduced in 2007 at the request of London TravelWatch
  - 3.2.2 Route 507 links Victoria and Waterloo via Horseferry Road and Lambeth Palace Road.
  - 3.2.3 For the new contract commencing in May 2009 TfL is considering replacing the articulated buses with conventional single deckers of 12 metre length. Operators are also being asked to submit prices based on the continued use of articulated buses (which are 18 metres long).
  - 3.2.4 Ticket selling and checking arrangements for the single deck option are currently being considered.
  - 3.2.5 The level of service to be provided under the 12 metre single deck option would involve increasing the frequency of buses in the morning and evening peaks by 8 bph (80% more), whilst the daytime and evening services would remain at 10 bph daytime and 5 bph evenings. A weekend service of 5 buses per hour is being considered at the request of London TravelWatch, as the 507 serves an area of central London which is currently without weekend services. At peak times buses would run every 3-4 minutes, in the daytimes every 10 minutes, and in the evenings every 12 minutes (as now).
  - 3.2.6 Route 507 has a peak vehicle requirement of 9 buses. An 80% increase in service frequency would require another 8 buses to be added to the schedule.
- 3.3 Route 521
  - 3.3.1 Route 521 links Waterloo and London Bridge via Kingsway, Holborn Viaduct (stops outside City Thameslink station), St.Paul's (New Change), Cannon Street and Monument.

- 3.3.2 For the new contract commencing in May 2009 TfL is considering replacing the articulated buses with conventional single deckers of 12 metre length. Operators are also being asked to submit prices based on the continued use of 18-metre articulated buses.
- 3.3.3 Ticket selling and checking arrangements for the single deck option are currently being considered.
- 3.3.4 The level of service to be provided under the 12 metre single deck option would involve increasing the frequency of buses in the morning and evening peaks by 13 bph in the morning peak (76% more), and 9 bph in the evening peak (60% more), whilst the daytime and evening services would remain at 6 bph daytime and 5 bph evenings. In the morning peak buses would run every 2 minutes and in the evening peak every 2-3 minutes, in the daytimes every 10 minutes and in the evening every 12 minutes (as now).
- 3.3.5 TfL proposes to use single deck buses on these routes because they believe they offer faster boarding and alighting than double deck buses and on route 521 they will permit the continued use of the Aldwych underpass.
- 3.3.6 Route 521 has a peak vehicle requirement of 19 vehicles. A 76% increase in service frequency would require an additional 15 buses to be added to the schedule.

## 4 Commentary

4.1 In preparing this report the secretariat asked TfL to provide answers to a series of questions, if the proposals for double deck operation on route 38 and 12 metre single deck operation on routes 507 and 521 were to go ahead.

4.1.1 *Is the capacity provided sufficient to meet the existing demand and any additional demand generated through increased frequencies?*

TfL's response : We have set service frequencies in each case to provide sufficient capacity at all times. The peak capacity for each route is as follows based on a maximum of 120 passengers for an articulated bus, 85 for a double deck bus and 70 for a 12-metre single deck vehicle.

Peak hour capacity (spaces per hour)

Route	Articulated buses	Double deck (38) or single deck (507/521)
38	2400	2380
507	1200	1260
521	2040	2100

4.1.2 *Has TfL modelled what the effect at peak times will be on passenger flows through the major terminals at Victoria, London Bridge and Waterloo – especially as all three stations (and City Thameslink and Cannon Street) will be affected by ongoing redevelopment during the period of the contract?*

TfL's response : We have set frequencies to provide sufficient passenger capacity. We do not expect passenger flows through the stations to alter significantly as a result of the bus service changes. All the services will be kept under review, including during any redevelopment work.

4.1.3 *Can the bus stations and stands used by these services cope with the extra demands on them at peak times?*

TfL's response : We will be considering operational factors as part of the tendering process.

4.1.4 *Will there be any impact on road capacity – especially at tight corners, given that on routes 507 and 521 two single deck buses will be 50% (6 metres) longer than one articulated bus (length 18 metres)?*

TfL's response : All the proposed vehicle types are suitable for the relevant routes. We will be considering operational factors as part of the tendering process.

4.1.5 *Will passenger journey times be increased, because vehicles are likely to spend more time at stops allowing passengers to board and alight – because of the reduced numbers of doors available for this?*

TfL's response : For the non-articulated vehicles boarding and alighting will take a little longer at the busiest stops.

4.1.6 *What will be the effect on reliability on these and parallel routes?*

TfL's response : As usual we expect all operators to run a reliable service, including properly resourced schedules and adequate service control. We shall continue monitoring performance of the network.

4.1.7 *Will it increase the cost of operation and does it represent value for money?*

TfL's response : We are seeking costs for operating the 507 and 521 with 12-metre single deck buses and the 38 with double deck buses. We have also requested that operators provide costs for operating each route with articulated buses. Once these costs are received we will make a decision on vehicle type, with due attention to what value for money each proposal represents.

4.1.8 *Will it cause diversion of traffic onto the Underground or other parallel bus routes?*

TfL's response : We do not anticipate significant changes.

4.1.9 *Has TfL carried out any attitudinal research into whether passengers and non-passengers do or do not like articulated buses?*

TfL's response : We discussed this question and you confirmed that you wish to know whether TfL had carried out any research with passengers using the 38, 507 and 521 on their opinions of the proposed changes. We are consulting groups representing passengers, including London TravelWatch. No specific attitudinal research is being carried out as part of this consultation.

- 4.2 All three routes perform the important function of distributing large numbers of commuters from the main line termini at Waterloo, Victoria, London Bridge, Cannon Street and City Thameslink. They provide an alternative to Underground services, particularly for shorter distance journeys such as Waterloo to Holborn, Lambeth Palace, and Millbank, London Bridge and Cannon Street to St.Paul's and Holborn, and Victoria to Hyde Park Corner, Green Park, Piccadilly, Marsham Street and Millbank. Given that significant increases in the use of National Rail services are forecast, including during the peak hours, demand for bus services feeding main line termini is likely to rise similarly.
- 4.3 For this type of journey single deck vehicles have been used in the past because passengers often prefer not to have to go upstairs. Route 38 was for many years 'shadowed' by a Red Arrow service between Victoria and Piccadilly for this very reason using single deck driver-only buses. Route 38 itself was previously operated by Routemaster vehicles with a crew of two. Routes 507 and 521 have always been operated by one-person single deck vehicles.
- 4.4 At the main line termini it is not uncommon in the morning peak for several trains to arrive near simultaneously, with several hundred passengers then seeking to board buses for onward travel. One of the main reasons for the introduction of articulated buses on routes serving the main line termini was that these numbers could be absorbed more easily and with greater speed of boarding than with conventional vehicles, either single- or double-deck.
- 4.5 There is also the issue of whether the bus stands at Victoria, Waterloo and London Bridge are capable of absorbing the additional vehicles that are proposed under the options for replacing articulated buses. In the case of route 38, two double deck vehicles can occupy the space required for one articulated bus. On routes 507 and 521, however, the use of 12 metre single deck vehicles means that two of these buses will occupy 33% more space than one articulated bus. At peak times there is often congestion amongst buses at Waterloo, London Bridge and Victoria. Adding extra vehicles, occupying more space, could make this situation worse not only for the routes concerned but on other parallel services where they also perform a longer distance function e.g. Victoria–Hyde Park Corner (also served by routes 2, 8, 16, 36, 52, 73, 82, 148 and 436), Victoria–Green Park (also served by route 8), Waterloo–Holborn (also served by routes 1, 59, 68, 168, 171, 188, 243 and X68) and London Bridge–Cannon Street–St. Pauls (also served by route 17). This could come about either by the physical introduction of extra vehicles or by passengers switching to other routes if they are unable to board the vehicles providing the service. Passengers might also decide to switch to other modes, which could lead to additional congestion, particularly on the Underground.
- 4.6 The proposed use of 12 metre rigid single deck vehicles raises the question of their ability to negotiate tight corners, where articulated vehicles have a clear advantage. On the routes concerned there are a number of difficult manoeuvres, which can increase journey times and congestion for other vehicles. When 11 metre vehicles were used on these routes previously, their restricted turning circles and extended rear overhangs proved problematic.
- 4.7 One of the principal objections to the use of articulated buses in London has been the alleged risk to cyclists, and their potential to cause accidents or increase congestion. TfL has previously stated that there has been no measurable increase in either congestion or accidents since the introduction of articulated buses on these routes. They pass through some of the most highly trafficked areas of London, and are therefore more vulnerable to

accidents, but their safety record is not significantly different from that of other parallel routes.

#### 4.8 Value for money.

4.8.1 The principal costs arising from bus operation are staff, fuel, vehicle purchase and maintenance. Increasing the requirement for all of these – particularly staff at peak times - must increase the cost of operating the services. These additional costs (typically £300,000 per annum per vehicle – an estimate by London TravelWatch’s officers, which TfL has not disputed) will have to be recouped either from increased revenue or increased subsidy. Increasing the frequency and therefore the attractiveness of a service may increase revenues by attracting additional passengers. But as these services operate in areas where the level of public transport usage is already high, the scope for such increased revenue may be limited. The costs of up to an additional 42 vehicles (an estimate by London TravelWatch officers based on published sources) added to the peak vehicle requirement is likely to be in the region of £12.6 million per annum for these services alone.

4.8.2 At present no fares are collected on board on the routes subject to consultation, with all trips being pre purchased, either from roadside ticket machines or via Oyster cards, Travelcards and bus passes. The reason for adopting this system was to reduce dwell times at stops, as all three doors are available for entry and exit. There has, however, been criticism that fare evasion on articulated buses is higher than on conventional buses. TfL has previously assured London TravelWatch that although this is correct, the rate of evasion on articulated vehicles is only marginally greater. The use of double deck and 12 metre single deck vehicles could potentially reduce the evasion rate. But routes 507 and 521 routes carry large numbers of Travelcard holders, and it is probable that the public perception of greater fare evasion is due in part to the fact that Travelcard holders are not required to ‘touch in’ on these services. Even with reduced levels of fare evasion, it is unlikely that the additional revenue captured would cover the costs of increasing the frequency of the service on the scale proposed.

4.8.3 Therefore, the burden of any increased costs is likely to be borne by extra public subsidy.

## 5 Discussion

5.1 The use of articulated buses in London is a politically emotive political subject. But this should not deter London TravelWatch, as representatives of users of all modes, from expressing a view on the merits or demerits of these proposals.

5.2 Articulated buses have proved themselves to be an effective means of distributing large numbers of passengers on short journeys from main line termini whilst minimising the cost of operation.

5.3 The proposals put forward by TfL do offer the benefit of increased frequency. But the additional costs arising from this change are likely to be significantly higher than any additional revenues that may be generated.

## **6 Equalities and Inclusion implications**

- 6.1 Under TfL's proposals, all of the buses on these routes would continue to be fully accessible. But articulated buses offer more room for wheelchairs and buggies, and because they are single-deck, more seats are available for any passengers who have difficulty in using stairs.

## **7 Legal powers**

- 7.1 Section 248 of the Greater London Authority Act 1999 places upon London TravelWatch (as the London Transport Users Committee) a duty to consider – and where it appears to it to be desirable, to make recommendations with respect to – any matter affecting the functions of the Greater London Authority or Transport for London which relate to transport (other than of freight). Section 252A of the same Act places a duty upon it to cooperate with other bodies representing the interests of public passenger transport services provided wholly or partly within the London railway area.

## **8 Financial implications**

- 8.1 The contents of this report have no specific financial implications for London TravelWatch.

## **9 Recommendations**

- 9.1 (a) That whilst supporting increased service frequencies, London TravelWatch is concerned that the costs incurred by using non-articulated buses on services 38, 507 and 521 may be significantly higher. This would deplete the funds available to TfL for other purposes, and would not represent good value for money.
- (b) That London TravelWatch believes that, when considering tenders for routes currently operated by articulated vehicles, TfL should choose the option offering best value for money that is consistent with providing full accessibility and fitness for purpose.
- (c) That London TravelWatch would welcome the introduction of weekend journeys on route 507 as this serves residential areas of Westminster otherwise not served by bus on these days.
- (d) That TfL should undertake (and publish) attitudinal research into the preferences of users of routes 38, 507 and 521 regarding vehicle type and design before committing itself to any change in the type of vehicles used.