

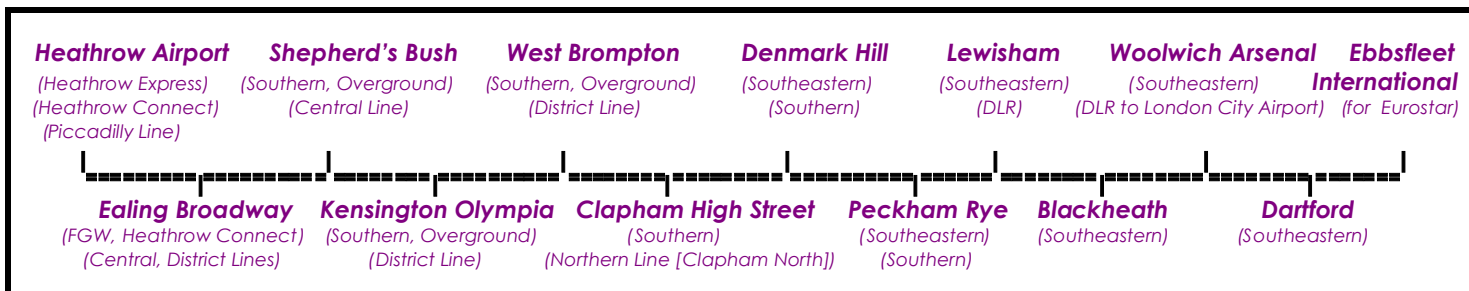


West London Line Group



THE WEST LONDON LINE GROUP ENTRY TO “THE RAILWAY FORUM”/ “MODERN RAILWAYS” RAILWAY INDUSTRY INNOVATION AWARDS 2007

A proposal for a new innovative overground rail service between Heathrow Airport and Ebbsfleet International



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1. Introduction

1.1 The West London Line Group (WLLG), the principal passenger support group for those using tube and/or rail services at stations on the West London Line, is submitting as an entry to these awards its proposal for an innovative overground rail service between Heathrow Airport and Ebbsfleet International Passenger Station (IPS), via the West London Line (WLL), the South London Line (SLL), and the North Kent Line (NKL).

1.2 We see this new Heathrow-Ebbsfleet link fulfilling seven major purposes, as well as opening up myriad minor travel opportunities. These seven main purposes are: -

- 1. To link Heathrow (either directly or with only one change) with key centres in South and South East London, Surrey, Sussex and Kent, from where at present travellers need to change at least twice on a rail-based journey either via the Piccadilly Line or via Paddington for the Heathrow Express.**
- 2. To link Heathrow (via one change at Shepherd's Bush) with key centres in North East, North and North West London, Hertfordshire and the Midlands.**
- 3. To restore the link between West and South West London and Eurostar when the latter quits Waterloo International.**
- 4. To link London City Airport with inner South and South West London.**
- 5. To provide a direct link between an area whose population is expected to grow (inner South London) and the WLL corridor, where employment is expected to increase.**
- 6. To provide orbital connections between many key inner London centres, e.g., Woolwich - Peckham; Lewisham - Shepherd's Bush; Clapham - Ealing.**
- 7. To improve links between key town centres in West, South and South East London and the Exhibition Centres at Earls Court and Olympia.**

2. Background

2.1 This proposal has its origins in the continuing steady progress of linking the UK rail network to the country's airports. It was inspired by the inauguration of the trans-Pennine Hull-Manchester Airport service, the success of the Thameslink service to Luton and Gatwick Airports and the Southern Wafford-Brighton service that also links Gatwick with many key traffic generators in West and North West London.

2.2 The proposal is underpinned by (i) three policy aims of Central Government (to allow UK air traffic to grow, especially at London's airports, to reduce environmental pollution and congestion caused by excessive car use, and to achieve best use of the existing national rail network), (ii) the Mayor of London and Transport for London's predictions in terms of population and workforce growth to 2016 and beyond, and (iii), by predictions by rail industry observers, including London TravelWatch, of increased demand for rail travel in general and to, from and within London in particular.

2.3 It is further reinforced by: -

1. a lack of good orbital transport routes in London, especially for those wanting links to airports and Eurostar
2. the likely impacts of switching all Eurostar services from Waterloo to St Pancras and with greater use by Eurostar trains of Ebbsfleet IPS rather than Stratford or Ashford IPS

3. the Docklands Light Railway (DLR) extension to link London City Airport and Woolwich Arsenal
4. levels of and growth in demand for orbital rail across London as shown by Thameslink, the NLL and the WLL, especially the Southern Brighton – Watford service. These all demonstrate strong demand in both directions by passengers not wanting a Central London destination. This augurs well for a West London – South East London rail link, especially as its terminals are the UK's first-tier international transport facilities (Heathrow Airport and Ebbsfleet IPS) and it offers good connections to/from two principal second-tier ones, namely Gatwick, and London City Airport. Luton Airport would be reachable if interchange were provided by high-level platforms at Loughborough Junction, sought by many Cross London RUS respondents.

3. Outline Concept, Routeing and Interchanges for Heathrow-Ebbsfleet rail service

3.1 The service would run half-hourly throughout the normal traffic day. It would link a number of key traffic generators while offering good links with other rail services across London and beyond, including international destinations. However, almost entirely throughout its length, it would use existing infrastructure that seems to have relatively high levels of spare capacity.

3.2 The service would call at: -

Heathrow Airport - Ealing Broadway - Shepherd's Bush - Kensington Olympia - West Brompton for Earl's Court - Clapham High Street - Denmark Hill - Peckham Rye - Lewisham - Blackheath - Woolwich Arsenal (for London City Airport via the DLR) - Dartford - Ebbsfleet IPS

3.3 Other stations on the route may also be able to demonstrate sufficient demand for the service to call. Candidates include Hayes & Harlington, Southall, Charlton and Abbey Wood.

3.4 Other stations that may also demonstrate demand but would need new platforms to be built would be Brixton (High Level), Loughborough Junction (High Level) and Brockley (High Level).

**3.5 Just having one interchange during the journey opens up myriad secondary travel opportunities. Key among them would be that between the UK's principal airports: -
Gatwick - East Croydon - Kensington Olympia - Ealing - Heathrow**

3.6 Other examples could include: -

East Croydon - Kensington Olympia - Southall;

Greenwich – Lewisham – West Brompton for Earl's Court;

Clapham High Street – Shepherd's Bush – stations on the A40 corridor (North Acton-West Ruislip)

Notting Hill Gate – Shepherd's Bush – Heathrow

Harrow & Wealdstone/Wembley Central – Shepherd's Bush – Ealing

3.7 There would be many more such opportunities if: -

through trains to/from South East London/Kent called at Lewisham or Clapham High Street, and

others from the West Country, Reading and Slough called at Ealing Broadway.

3.8 Finally, connecting with Virgin Cross-Country (VXC) services at Kensington Olympia could offer:-
Ebbsfleet/intermediate stations – Kensington Olympia – key centres between Banbury and Glasgow

4. Initial Indications on Feasibility

4.1 The Group included this proposal in its response to the Cross London Route Utilisation Strategy (RUS) consultation and has welcomed the fact that Network Rail's comments only referred to the lack of a west-south chord planned between the NKL and Ebbsfleet IPS and that timetabling would probably be very difficult on the Great Western Main Line (GWML) and through Lewisham. The Group is very much encouraged by this, since we have interpreted this to mean that the proposal is not ruled out of court *per se* and that from Network Rail's perspective, given the installation of the infrastructure below, the route is physically feasible. Furthermore, we understand that the whole route is at full passenger standard, given the VXC service routeings via Acton Wells and Factory Junction.

4.2 Thus the main constraint would seem to be pathing the service among the multiplicity of unconnected arrangements to be encountered throughout its journey. However, we are encouraged by the existence of (i) the relatively low numbers of other trains-per-hour throughout much of the route, (ii) "holding areas", i.e., stretches of line not normally traversed by other passenger trains where the service could be held for a short period in order to resume a path – these seem to be available for most of the rest of the route, (iii) tolerance by passengers towards such practices, (iv) the options offered by two other routes between Lewisham and Dartford that could be used for trains that need not run via Woolwich Arsenal and (v) the option for double-running via Clapham Junction in either direction.

4.4 Transport for London, in raising our proposal with us yesterday, have also indicated that they have undertaken what seems to have been a swift internal review of the proposal, and appear to regard the proposal as having merit. In addition, they have offered advice to the Group on the next issues to consider in developing the proposal further.

5. Infrastructure Requirements

5.1 At Heathrow, it is hoped that, to meet the Government's aims above, sufficient capacity has been or can be allowed for to accommodate our proposed service, as it represents a relatively modest growth in resource demand. If this is not the case, it could terminate at Hayes & Harlington or the nearest appropriate point westwards - probably Slough. However, this could seriously undermine the service's appeal, as passengers traveling to or from Heathrow would have to change at Hayes & Harlington.

5.2 Assuming the service ran to and from Heathrow, due to the prohibition of diesels in the sub-surface stations there, the line between Shepherd's Bush and Acton Main Line would need to be electrified, so that dual-voltage trains could be deployed on the service and powered by third rail east of Shepherd's Bush and by overhead feed west of this point. Alterations to the track layout may help with line speeds through Acton Wells Junctions and doubling the track in the Willesden Junction area could also assist train movement markedly.

5.3 The principal additional element needed would be some form of interchange facility at Ebbsfleet between the NKL and the International Passenger Station (IPS), the three options for which would appear to be (i) a new station on the NKL at a convenient point to access the IPS platforms, (ii) a new west-south chord for the service to reach existing platforms at the IPS, or (iii) the chord to serve a new pair of platforms adjacent and linked to the IPS.

5.4 We have not looked in detail at the options; however, Ebbsfleet IPS has been built on what seems to be a large scale and we believe that, as at Heathrow, enough capacity can be found on site for one of the above scenarios, or an alternative, to be realised at a reasonable cost.

6. Service Delivery

6.1 We believe that the service could be delivered in any of three ways; (i) as an extension to an existing franchise, (ii) under an "open access" arrangement, or (iii) as a new concession arrangement allowed by DfT to TfL to be let to an operator as part of its Overground operation. The last option would ensure that both Heathrow and Ebbsfleet would be seen as destination stations on the Overground map, which would also show the link between them as part of the Overground network. This could significantly raise the profile of the service, the network and the Overground "brand" simultaneously, across London and internationally.

7. Resource Implications

A 3-hour round trip at a half-hour frequency would indicate a need for 6-7 dual-voltage (overhead and third-rail) 4-car units in service with 2 more to cover failures and maintenance needs. These extra 9 units could be added to TfL's present order of Class 378's, with consequent economies of scale and modified in the light of experience with earlier deliveries. The 4-car trains should cater adequately for demand when the service starts, but we estimate they should be extended to 6-car units in due course, probably within five - ten years.

8. Benefits of the proposed Heathrow-Ebbsfleet rail service

8.1 Overall - The service will meet three major aims of Government Policy, in terms of air travel; traffic pollution and congestion; best use of the rail network, plus it will encourage modal shift from road to rail.

8.2 Transport - It will offer direct links, single same-platform interchanges and other straightforward interchanges.

8.3 Orbital Commuting - The service will link inner South and South East London, an area of high forecast population growth (much of which is inhabited by less well-off communities), directly with an area of the highest forecast employment growth in London outside the West End, City and Docklands, i.e., the West London Line corridor.

The service will be able to ameliorate negative effects of Terminal 5 drawing employment from, and thus creating new unwanted vacancies in, West London by providing a direct link between West London and areas of deprivation in South and South East London and (by changing at Shepherd's Bush – thus bolstering the case for the retention of through WLL-NLL services) similar areas in North and North East London.

8.4 Radial Commuting – New orbital trains will give more capacity between sub-regional centres, e.g., Woolwich – Lewisham, Lewisham – Peckham, thus leaving more space on London-bound trains for central London commuters.

8.5 Regeneration - Network Rail's aim to link regeneration areas together is fully met by this service linking at least 14 of these (Hayes, Southall, Shepherd's Bush, North Kensington, North Fulham, South West Chelsea, Wandsworth Road, North Clapham, Brixton (if a High Level station is built), Peckham, Lewisham, Charlton, Woolwich/Thamesmead, Dartford, North Kent Riverside).

8.6 Links between Heathrow and Watford and the South/West Midlands - From Dec 2008/Jan 2009, the fewer stops by WCML trains at Watford Junction may lead to the demise of Virgin's Watford-Heathrow coach link.

Watford passengers to Heathrow would then travel by rail via Shepherd's Bush (opening July 2007); if the Southern WLL service was extended to Milton Keynes, this would offer the same facility for Milton Keynes residents. If the Southern WLL service was extended to Birmingham, this would offer the same facility to residents in Birmingham, Coventry, Rugby and Northampton as well as ease access between Heathrow and the NEC. Use of this rail link would also relieve pressure on the M1 and the NW quadrant of the M25, as well as on local road networks.

8.7 The Heathrow-Ebbsfleet service's relationship with Crossrail - The service will generally have a positive-to-neutral effect on Crossrail as it should not impinge on physical spaces needed for Crossrail; it will partly do the job of Crossrail at much lower cost; passenger usage will provide data on cross-London travel patterns; the service will complement Crossrail by linking many traffic generators not served by Crossrail; and its investment requirements are considerably more modest than, and should not impact upon, those for Crossrail.

8.8 Double-running via Clapham Junction - Allowing the service to double-run in and out of Clapham Junction would ensure that the UK busiest rail interchange would be linked directly with Heathrow, South East London and Eurostar. The link between Clapham Junction and Heathrow via Ealing may also reduce the need for the Airtrack link via Staines. West and South West London residents (likely to be the main bulk of Eurostar's outbound markets) would have their connection restored to Eurostar at Ebbsfleet. This would avoid their needing to travel via Waterloo and then either (i) the Jubilee Line and Stratford to Stratford IPS (where few Eurostar trains will stop before 2011), (ii) the Northern and Piccadilly Lines (needing another change at Leicester Square underground station), or (iii) midi-buses to St Pancras IPS.

Residents of Hampshire, Berkshire and Surrey would be able to travel by rail via Clapham Junction to Ebbsfleet IPS, rather than by car to Ashford IPS, where we understand fewer Eurostar trains will stop in future.

Double-running of the Heathrow-Ebbsfleet service to/from Clapham Junction will create a rail connection between the South London Line (SLL) and Clapham Junction, which is one of the options (Option 7) in Network Rail's Cross London RUS. It would also create a rail connection

between Lewisham and Clapham Junction, which is one of the outputs sought from this RUS by London TravelWatch.

Double-running of the proposed service to/from Clapham Junction may also cause capacity issues in relation to trains terminating at Platforms 1 and 2 there, to the extent that it may make the case for extending the TfL concession Stratford/Barking – Clapham services to East Putney. If such extensions were to be carried out in conjunction with terminating some District Line trains at Putney Bridge or Parsons Green, the new paths thus created south of East Putney would allow the TfL concession service to be extended to/from Wimbledon. This would help reduce overcrowding and offer new travel options via Clapham Junction for passengers on the Wimbledon District Line branch, restore the weekday morning peak High Street Kensington – Olympia District Line service and spread the Overground network further across London.

8.9 Completing the WLL "Star" Network - Establishing the Heathrow-Ebbsfleet service would strengthen significantly the cross-London rail network and give greater profile to similar cross-capital links, e.g., Southern's Brighton-Watford/Milton Keynes/Birmingham service, the Thameslink and Overground networks. It would also complete the "star" WLL network, whose two existing axes (Brighton-Birmingham, Stratford-Wimbledon) would be complemented by the third (Heathrow-Ebbsfleet), the three thus forming a star-shaped network, based on the core WLL corridor. This third axis would also allow more people to reach the corridor, its employment clusters (Empress State at West Brompton, the Hammersmith-Kensington corridor at Kensington Olympia, plus London Westfield, the retail and leisure complex at Shepherd's Bush) and its venues (Earls Court and Olympia). It would also mean that those living and staying in the WLL corridor would have new travel options to many parts of London, plus four of the capital's international gateways (Heathrow, Gatwick and London City Airports and Ebbsfleet IPS).

9. Conclusion and Next Steps

The Group believes that a Heathrow-Ebbsfleet rail service should be a viable one, at least in operational terms, given: -

the relatively low frequencies of other passenger services on nearly all the route, the existence of and passenger tolerance towards "holding areas" elsewhere on the route, plus the routing options for the service between Lewisham and Dartford, and the option for and advantages of double-running via Clapham Junction (see 4.2),

the strong likelihood of finding the physical capacity at both Heathrow and Ebbsfleet to secure the relatively minor infrastructure improvements to accommodate the service (see 5.1, 5.4, 5.5),

the short distance involved in extending the electrification between Acton Main Line and Mitre Bridge and the existence of trackwork or at least alignments that would be available to double the track, if necessary or desirable for pathing purposes, in the Willesden Junction area

the relative ease in obtaining new rolling stock through increasing a current or recent order, the opportunity to build in improvements into later deliveries of such an order and the relatively modest investment needed for these improvements, and

the likely range of suitable options for one or more depots/stabling areas, and the expected ease of access to a potential workforce offering the right mix of skills.

In the light of the above, the Group is now strongly urging the key players in the rail industry - DfT, Network Rail and TfL in particular, as well as existing and potential domestic rail operators (including BAA and Eurostar) - to undertake further detailed work to determine a Heathrow-Ebbsfleet service's true potential contribution to transport, social and economic objectives, and to confirm the service's establishment, development and success.