

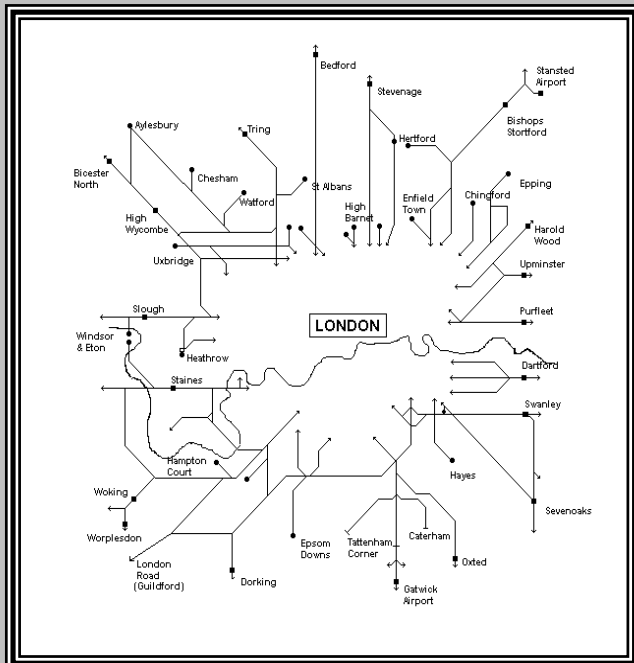


**LONDON TRANSPORT USERS COMMITTEE**



**Speaking for transport users  
in and around London**

# Requirements for Train Services - Principles



May 2003

## **London Transport Users Committee**

*Speaking for transport users in and around London*



LTUC is the official watchdog for transport users in and around London.

The Committee's role is to:

- Investigate suggestions and complaints from users who are dissatisfied with the response received from the service provider;
- Conduct independent research and produce publications on issues affecting transport users;
- Maintain a regular dialogue with operators on differing aspects of their services;
- Assess the impact and make recommendations if proposals are made for the closure of a railway line or a station.

Our remit covers transport in and around London including the Underground, the National Rail network, London's bus network, Docklands Light Railway, Croydon Tramlink, taxis and other users of the Greater London Road Network. To find out more about us see our website **[www.ltuc.org.uk](http://www.ltuc.org.uk)**

Cover photograph : c2c train at Limehouse Station

Photograph courtesy of Anthony Rispoli, [www.londonserail.co.uk](http://www.londonserail.co.uk)

## Who should read this paper?

Chief Executives, Commercial/Business Directors, Operations/Production Directors and all timetable planning staff of the following organisations.

- Strategic Rail Authority
- Train Operating Companies (including Heathrow Express and Hull Trains)
- Network Rail
- Office of the Rail Regulator
- Transport for London
- London Underground
- Docklands Light Railway

Also senior officials of the Department for Transport and of Local Authorities and members of Rail User Groups

## What is the paper about?

**These proposals outline LTUC's requirements for the type and frequency of train services in the London area.**

The paper focuses solely on what the timetable should offer to the passenger. There are many other issues necessary to make up a quality service for the passenger and these are dealt with in other LTUC papers, (see Appendix 6). They are all described in general terms in LTUC's policy document 'London on the Move.'

Over the course of the year the current document will be supplemented by individual route supplements. These will show the extent to which present services comply with the requirements set out in this paper and will include suggestions on how progress should be made towards closing the gap between present provision and LTUC requirements. These requirements will form the basis of LTUC's input into the SRA's Route Utilisation Strategies.

We welcome dialogue with all interested parties regarding the precise requirements for each route. This may include consideration of higher standards where these can be justified or of more limited services where demand may be demonstrably low or costs would be exceptionally high.

A feedback form has been inserted in the back of this document. Each of the route analysis supplements will also include a feedback sheet.

## **EXECUTIVE SUMMARY**

This paper presents the principles that need to be applied to gain an adequate level of service for the transport users of London. The paper is not just a 'wish list', it should be considered as a reference document for those who make decisions on when and where trains run. The principles set out in this document will be developed during 2003 when individual route supplements will be issued.

The key points of the paper are :

- A good timetable is the key underlying principle to running a successful service.
- To be attractive to passengers services should be as frequent and convenient as possible.
- The standard off peak timetable must operate seven days a week (slightly later start up on Sundays) and late into the night.
- Good inter-operator and inter-modal interchange is essential between National Rail operators, DLR, LUL and other modes of transport.
- Routeing and stopping patterns should ideally be the same each day to make the services easily memorised.
- The network should be available to provide the maximum possible service to passengers whilst allowing sufficient – but no more than sufficient – time for maintenance

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**FEEDBACK SHEET INSERTED AT THE BACK OF THE DOCUMENT**

## **1. INTRODUCTION**

- 1.1 This paper presents Issue 2 of the London Transport Users Committee's (LTUC) Requirements for Train Services.
- 1.2 In 1999 LTUC's predecessor, the London Regional Passengers Committee (LRPC) published its Train Services Aspirations. That paper, which had its origins in LRPC's 1998 proposals for a South London Overground, proved useful in explaining to the rail industry how the Committee (as representatives of the users of rail services in and around London) considered how train services should be developed. Several train operators (TOCs) have made progress towards our goals and some of the principles have been taken on board for longer-term projects, e.g. in the re-franchising process and the work now under way to develop a South London Metro.
- 1.3 LTUC is pleased that the Mayor's Transport Strategy includes amongst its objectives the need for better integration of the national rail system with London's other transport systems and the need for a Londonwide, high frequency 'turn up and go' Metro service. Inclusion of these objectives is particularly important because under the GLA Act the Strategic Rail Authority (SRA), as a body exercising statutory functions in relation to Greater London, has a duty to have regard to the Mayor's Transport Strategy.
- 1.4 This requirement is clearly acknowledged in the SRA's Strategic Plan. The emerging co-operation between the SRA and Transport for London (TfL) in development of the network provides clear evidence that the need for substantial improvements to London's rail services is now officially recognised.
- 1.5 Whilst most public attention is focused on the long-term major schemes such as the East London Line Extension, Thameslink 2000, Channel Tunnel Rail Link, and CrossRail 1 & 2, it is important to remember that many improvements could be introduced quite quickly and with little investment. In some cases, e.g. standardisation and extension of first and last train times or standardisation of Bank Holiday services, all that is needed is a change of operational practices. In short, we can have honey for tea today as well as jam tomorrow.
- 1.6 Issue 2 of LTUC's 'Requirements for Train Services' is a revision of Issue 1 (February 2002). The requirements themselves are broadly unchanged, but the presentation has been altered to provide a clearer sense of LTUC priorities. The 'Specific TOC Proposals' section has been removed in favour of route supplements, which we aim to complete by the end of 2003.
- 1.7 'Requirements for Train Services' starts by setting out the general principles on which LTUC believe London's rail services – within the GLA area, in the wider LTUC area and links with the national rail network as a whole – should be based. The Committee believes that these principles should inform all London area rail decision making, both short and long term, because the timetable is the core of the railway's product. Without a timetable which meets the needs and aspirations of both existing and potential users, investment in all other aspects of rail services (however important) will be ineffective. If the trains don't take people where they want to go, when they want to go, and with a degree of convenience and comfort which matches that of the private car, then Government targets for modal switch and for increasing patronage by 50% in ten years will not be achieved.

- 1.8 The Committee recognises that much of what it advocates requires investment and that it will take more than ten years to achieve the goals in full. The route supplements therefore will also offer constructive proposals for specific route improvements in the short term. These enhancements will require little or no infrastructure investment and should therefore be achievable within the next few years. Issue 2 thus sets out a structured approach to attaining the improvements by looking at the various routes in sections. By the end of 2003, all of the routes in the LTUC area will have a comprehensive analysis of services and time-scales suggested for which aspirations should be attainable. The supplements will be released periodically throughout 2003 with priority given to routes covered by the SRA Route Utilisation Strategies and franchise replacement programme.
- 1.9 The release of the SRA's Strategic Plan 2003 has seen many major projects put on hold and deferred due to lack of funding. This makes it more important than ever that services are improved as soon as possible where this can be done within the constraints of the existing infrastructure. LTUC therefore draws particular attention to the scope for:
- Improving off-peak services at low frequency stations where this can be done by adding calls to existing trains.
  - Bringing evening services up to the same standard as midday off-peak.
  - Introducing later last trains.
  - Re-planning timetables to achieve improved connections between services.
- 1.10 Finally, to assist those in the industry who are responsible for turning ideas into the actual timetables which are introduced each year, the paper sets out the process by which consultation with LTUC should be carried out. Adherence to this process should facilitate a positive dialogue between the industry and LTUC (as the statutory user representatives) when the details of each year's improvements are developed.
- 1.11 Nothing we ask for is radical. Elements of it are already provided somewhere on national rail, and much of it is already achieved by London Underground and Docklands Light Railway. We hope that the industry will see this paper as a useful contribution to the strategic framework it has been looking for to guide its development.
- 1.12 While we are confident that there is a broad consensus in favour of our proposals, LTUC wishes to encourage debate on the issues involved. The Committee therefore invites all sections of the industry, user groups, individual users and other stakeholders to comment on any aspect of its contents. The world does not stand still, so we expect to issue revised versions of our requirements from time to time. Appendix 3 lists those who responded to Issue 1, and we are grateful to them for taking the time and trouble to do so.



1.13 Responses should be addressed to:

Rail Support Officer  
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6 Middle Street  
London EC1A 7JA

Telephone 020 7505 9000  
Fax 020 7505 9003  
E-mail [railsupportofficer@ltuc.org.uk](mailto:railsupportofficer@ltuc.org.uk)

A feedback sheet is provided at the back of this paper – but please feel free to respond in whatever way you find convenient.

Copies of this paper can be downloaded from the LTUC website

[www.ltuc.org.uk](http://www.ltuc.org.uk)

## **2. WHAT PASSENGERS WANT**

2.0 'What the passengers want' provides the basis for the Committee's discussions and consultations about train service plans with TOCs, the SRA, TfL, LUL and DLR. They are based on the reasonable demands of existing rail users, and the need to encourage modal shift from private to public transport and thus provide services which are attractive both to present passengers and to present and prospective car users.

### **2.1 The good timetable!**

2.1.1 In March 2002 LTUC published 'London on the Move, transport policies for a liveable London'. This strategic policy statement set out a vision for all modes of transport in the London region. The following excerpt from 'London on the Move' describes what a good timetable (for all modes of transport) should include.

- Services should be as frequent as can be economically or socially justified. The more often services run, the more convenient they are, and the less waiting time there is (passengers dislike spending time waiting more than they dislike spending time on the move). The ideal is a 'turn-up-and-go' service, for which you do not need a timetable because the next service will always be along in a few minutes. Londoners do not expect to have to time their journeys by Underground to suit the convenience of the operator, and the same principle should apply to other modes too. Such a service also minimises the effects of cancellations. Six departures per hour (representing an average wait of five minutes) are the minimum that will achieve this standard. Where a turn-up-and-go service cannot be justified services should run a 'clockface' pattern, running at equal intervals at the same minutes past every hour.
- Peak timetables should be made by adding extra services to the basic off-peak service. Where capacity constraints make this impossible to achieve, any broken links in the peak should be provided with quick connections in lieu. LTUC is aware that this is not feasible at a limited number of stations.
- Parts of the transport system have been slow to follow changed work and leisure patterns that have increased the demand for travel on Sundays and in the evenings. The current tailing-off of many services at these times (and late starts on Sundays) can put people off making journeys by public transport. Although it would be difficult to justify daytime frequencies around the clock, to the individual passenger making a time-critical journey at unsocial hours (eg. to/from an early or late shift at work in an essential public service), the bus or train is no less important than to those who travel in greater numbers at other times of the day. The standard off-peak timetable must operate seven days a week (with a slightly later start-up being acceptable on Sundays) and late into the night. All-night services are needed between central London and key outer areas (including rail interchanges), as well as covering other important locations (notably airports).
- Opportunities should always be taken to improve journey times, particularly on rail networks through higher performance vehicles or infrastructure improvements. Inter-operator and inter modal connections must be convenient. Good connections can make a dramatic difference to end-to-end journey times,

and long waits for connections are particularly irritating. A turn-up-and-go service eliminates these automatically. Good connections coupled with fast journey times can compensate for the journey-time benefits of through services, so trade-offs may be possible in order to achieve the best overall result.

- 2.1.2 In addition, service routings and stopping patterns should ideally be the same all day, every day to make the facilities more passenger friendly and 'memorable'.

## **2.2 How to deliver the goods!**

- 2.2.1 The requirements must be pursued in the context of operational practicability, value for money and any other short term constraints that may face operators. However, when developing plans for infrastructure and rolling stock investment LTUC will expect the industry to take account of these requirements.
- 2.2.2 On some routes major infrastructure works may be necessary for these requirements to be met in full, and on others there may be a need for minor track layout or signalling improvements. LTUC expects the industry to take account of these issues when developing and prioritising both major projects and minor upgrades.
- 2.2.3. However, LTUC considers that on most routes – including those which require investment to achieve the full requirements – considerable progress can be made by reviewing present timetables and resource utilisation. Examples will be shown in the route supplements, which will be released throughout 2003, giving a comprehensive analysis of all services in the LTUC remit.
- 2.2.4 Where a route is used by more than one TOC, LTUC expects all TOCs to co-operate to provide integrated timetables in accordance with these requirements and in the overall best interests of all passengers. Such co-operation should, if necessary, be enforced by the SRA.
- 2.2.5 The favoured approach for timetable compilation is for services to operate all day on a consistent pattern, repeated at regular intervals. Except where 'turn up and go' metro services are scheduled, trains should be planned to provide good connections (irrespective of operator) at key hub stations.
- 2.2.6 To ensure that good connections are provided in both directions, the preferred arrangement is for services travelling in one direction to be the mirror image of the other direction<sup>1</sup>. This method has been used successfully in Switzerland (Takfahrplan) and the Netherlands for many years and increasingly so in Germany. It has also been used on parts of the UK network, e.g. the timetable on the Waterloo – Weymouth line and branches for many years from 1967 was largely both regular interval and mirror-image. In some cases the present infrastructure may not be able to fully support a *Takfahrplan*, particularly where tracks have been singled or where single-lead junctions have been installed. In these cases the benefits of the *Takfahrplan* can be taken into account in establishing the business case for infrastructure improvements.
- 2.2.7 Research is being undertaken into the application of *Takfahrplan* principles in the UK by the University of Leeds, see Appendix 5. We are also pleased to see

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<sup>1</sup> See Appendix 4

that Swiss and Dutch timetabling methods are highlighted in Transport 2000's "At the Leading Edge – A Public Transport Good Practice Guide" – a publication funded and welcomed by the SRA.

### **2.3 When do we want them?**

2.3.1 Naturally LTUC wants to see these very reasonable requirements implemented as soon as possible. However as indicated in para 2.2.1 we recognise that on some routes they are a step-change from present provision and that investment will be needed to achieve them in full. Equally, as stated in para 2.2.3, we believe that on most routes there is scope for improvement within the constraints of the present system.

2.3.2 Detailed suggestions for early improvement will be included in the route supplements, but in general terms we believe that the areas to look at should be:

- Bring stations with low frequency services up to a higher standard where this can be done by adding stops to existing trains;
- Bring evening services up to the same frequencies as daytime off-peak services;
- Review first and last train times, particularly where overnight engineering hours seems excessive in relation to the amount and frequency of work actually carried out.

2.3.3 Above all, do not let the best be the enemy of the good. Thus if a 10 minute 'turn-up-and-go' frequency is not immediately achievable, a 15 minute frequency would be very worthwhile and acceptable as a stepping stone towards the ultimate goal<sup>2</sup>.

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<sup>2</sup> This is the sensible approach being taken by the SRA and TfL for the pilot South London Metro routes.

### **3. JOURNEYS WITHIN THE LTUC AREA**

3.0 The following principles apply to rail services at stations within the LTUC area.

#### **3.1 Monday to Friday – midday off peak & evenings**

- 3.1.1 Within Zones 1-6 (see figure 1) a minimum of 6 trains per hour (tph), at regular 10 min. intervals where possible. (6 tph is the minimum standard for a ‘turn up and go’ metro service, i.e. one where passengers do not need to refer to the timetable when planning their journey.)
- 3.1.2. At stations beyond the Zones and extending to the boundaries shown in figure 2, a minimum of 4 tph, at regular 15 min. intervals where possible;
- 3.1.3 At all other stations in the LTUC area (see figure 3), a minimum of 2 tph, at regular 30 min. intervals where possible.
- 3.1.4 Off-peak services and train lengths should be sufficient to provide seats for all passengers<sup>3</sup>.

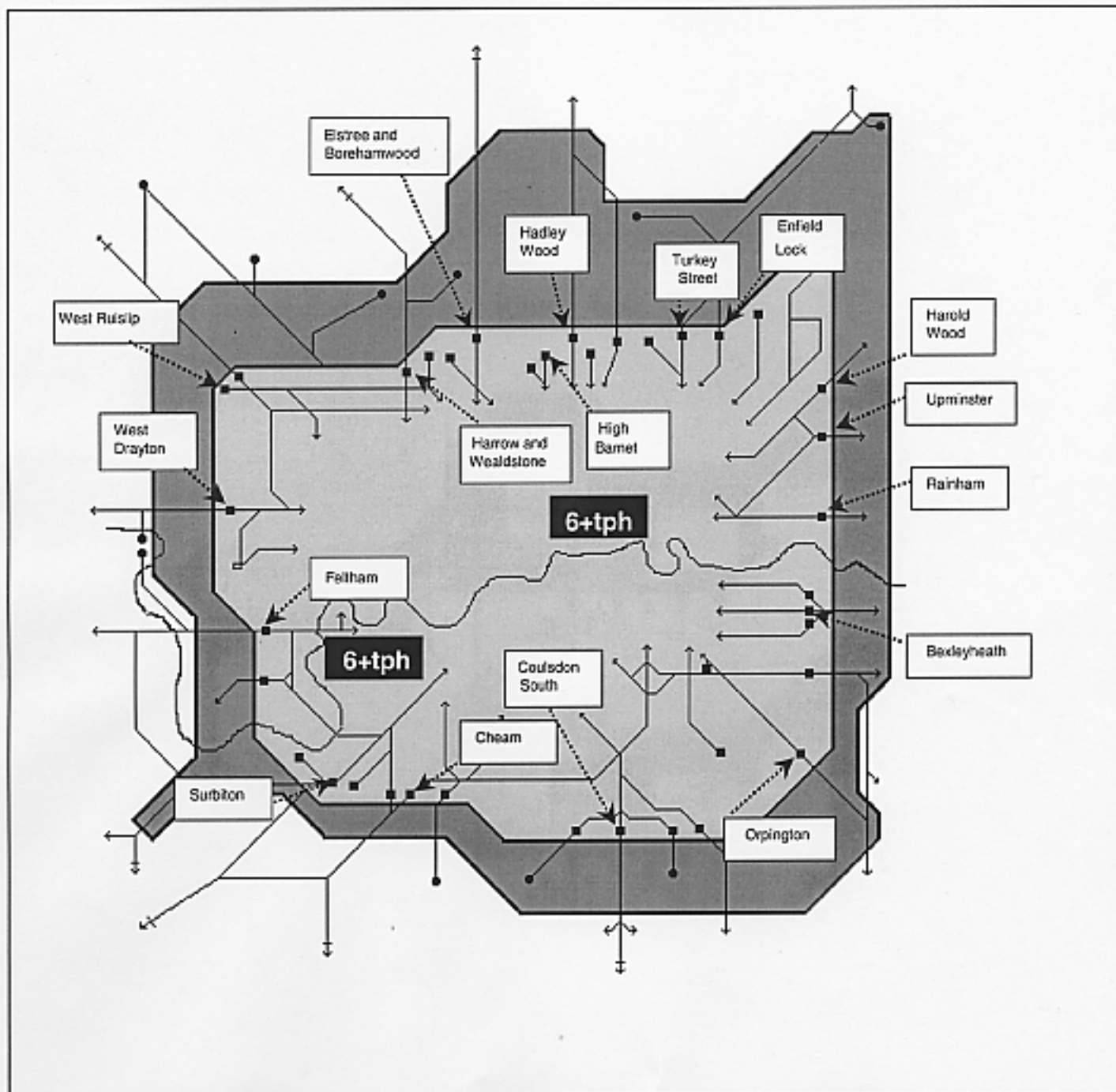
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<sup>3</sup> Except for moderate short distance standing on purpose designed metro rolling stock (max. 10 mins.)

**Figure 1 : Area of minimum six trains per hour**

*The named stations are LTUC's minimum standard for service frequencies at stations in the LTUC area (Not all routes and stations are shown on the diagram)*

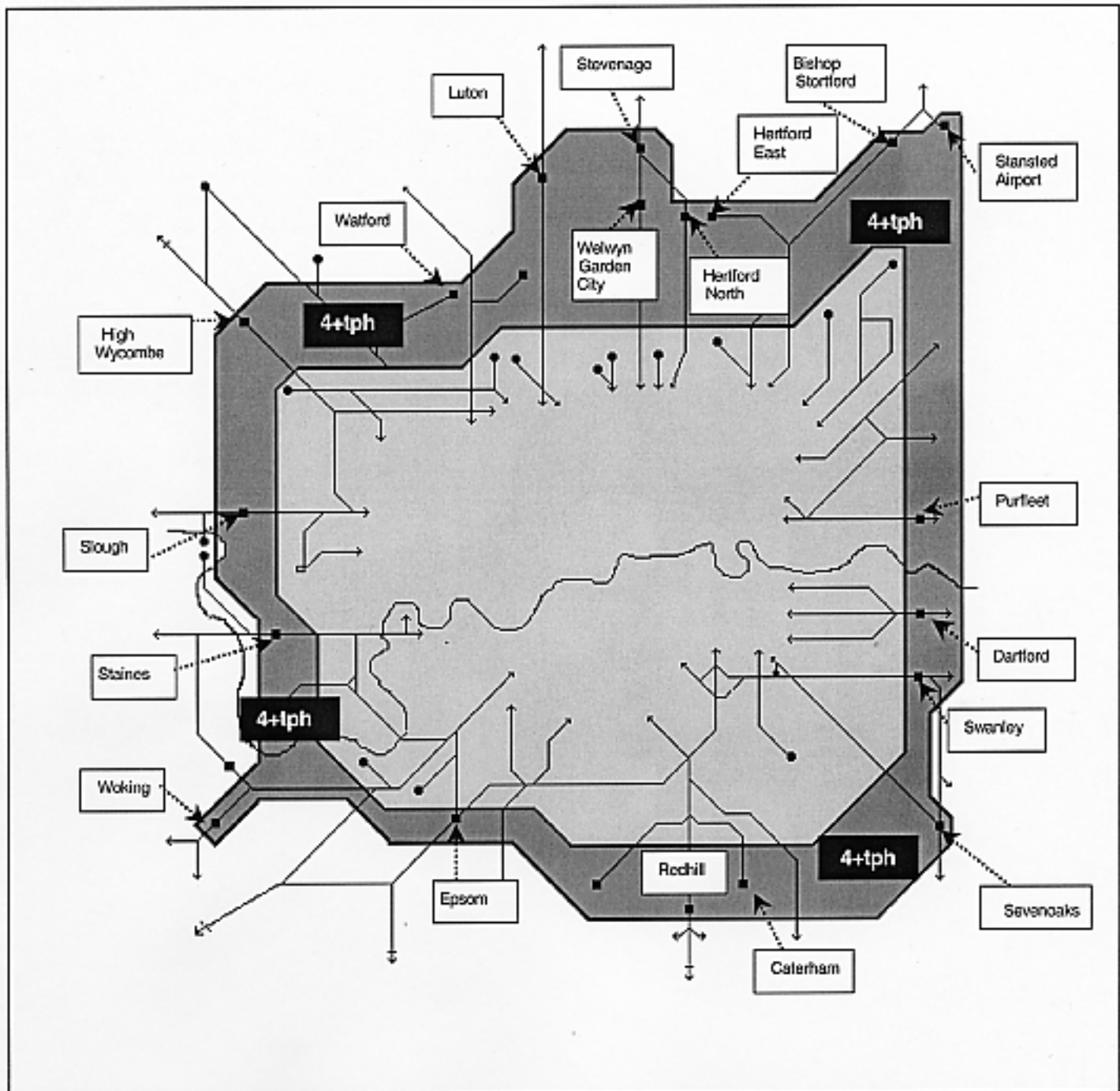
Please note that these are the Committee's broad aspirations and it is recognised that certain stations may be 'special cases' and are therefore not able to match LTUC's minimum trains per hour aspirations. All of the routes will be analysed in close detail and practical local issues discussed further in the individual route supplements that will be produced to accompany this paper.



**Figure 2 : Area of minimum four trains per hour**

The named stations are LTUC's minimum standard for service frequencies at stations in the LTUC area (Not all routes and stations are shown on the diagram)

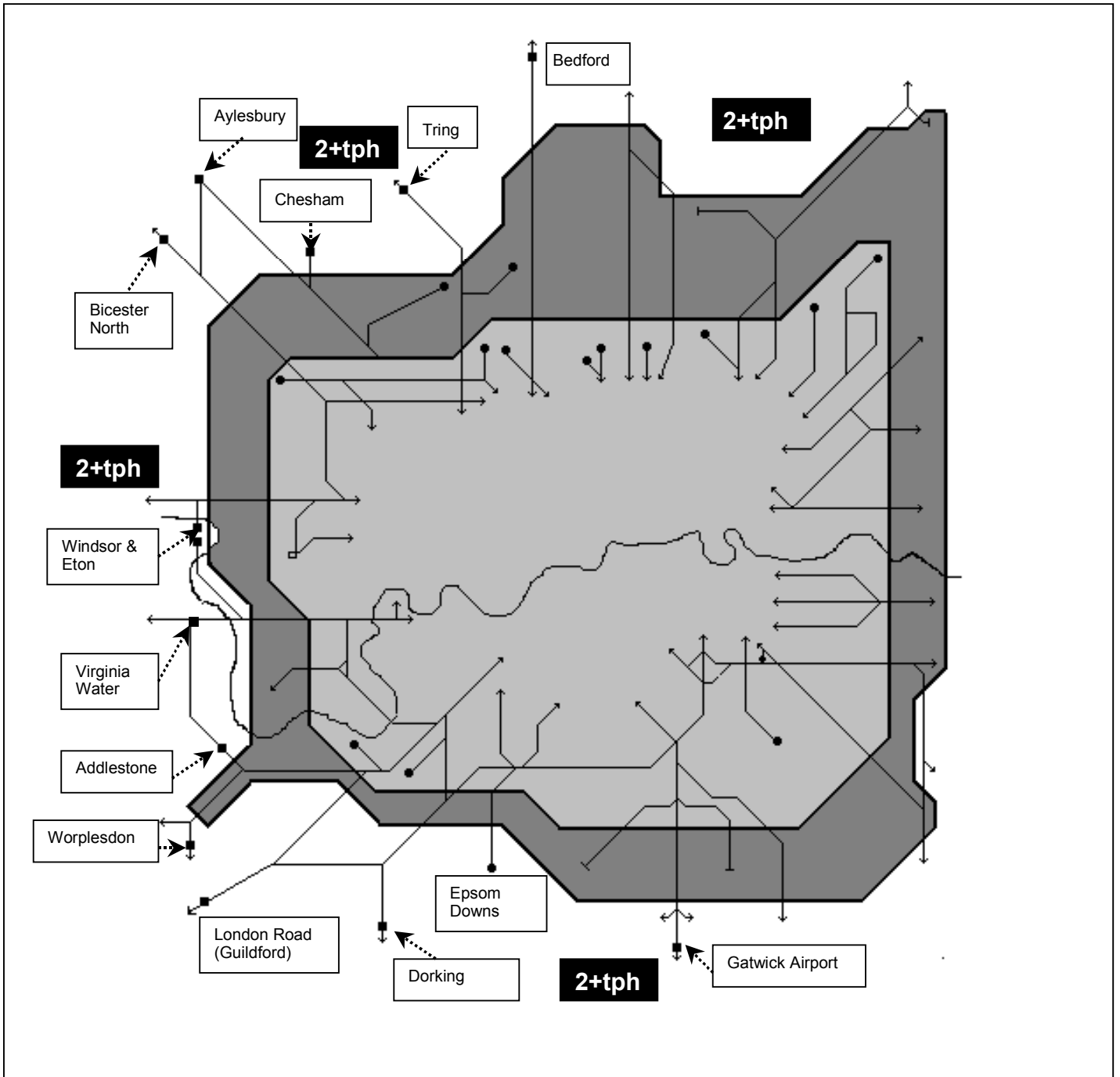
Please note that these are the Committee's broad aspirations and it is recognised that certain stations may be "special cases" and are therefore not able to match LTUC's minimum trains per hour aspirations. All of the routes will be analysed in close detail and practical local issues discussed further in the individual route supplements that will be produced to accompany this paper.



**Figure 3 : Area of minimum two trains per hour**

The named stations are LTUC's minimum standard for service frequencies at stations in the LTUC area (Not all routes and stations are shown on the diagram)

Please note that these are the Committee's broad aspirations and it is recognised that certain stations may be 'special cases' and are therefore not able to match LTUC's minimum trains per hour aspirations. All of the routes will be analysed in close detail and practical local issues discussed further in the individual route supplements that will be produced to accompany this paper.





### **3.2 Monday to Friday - peak**

- 3.2.1 Peak hour frequency should be no less than off-peak.
- 3.2.2 There should be sufficient capacity to ensure that no passengers have to stand involuntarily for more than 10 minutes, and to ensure compliance with PIXC (Passengers in excess of capacity) rules.
- 3.2.3 Peak service timetables should be constructed so that off-peak patterns and timings apply all day and that peak services are made up by adding extra trains to the basic off-peak pattern. Exceptionally, where capacity constraints make it impossible to adhere exactly to this principle, every effort should be made to ensure that any broken links (i.e. journeys which can be made by through train in the off-peak) are provided with quick connections in lieu.
- 3.2.4 Special consideration should be given to providing sufficient capacity for 'shoulder-peak' demand (generally arriving in London before 0730; 0900-1030 and returning from London 1530-1630 and 1830-2030).

### **3.3 Saturday**

- 3.3.1 The full Monday to Friday off-peak service should operate throughout the day.

### **3.4 Sunday**

- 3.4.1 Except for a later start-up (see First and Last Services – section 3.5), Sunday frequency should be the same as Saturdays.
- 3.4.2 It is recognised that the Network Rail's present maintenance practices lead to restricted Sunday services, particularly on multi-track routes. These maintenance practices should be reviewed and methods revised so that the train service standard described in above paragraph 3.4.1 can be attained in the next five years, i.e. by 2008.

### **3.5 First and Last Service**

- 3.5.1 All stations in the LTUC area should have first departures that facilitate connections with the first tranche of long-distance services from main London termini such as Paddington, Euston, King's Cross, Liverpool Street and Waterloo, and where possible to facilitate catching an early (pre-0630) Eurostar departure from Waterloo International. In general this means a first arrival in London by no later than 0600 on Mondays to Saturdays, 0730 on Sundays.
  - 3.5.2 In addition, on Sundays within the Zones, rail start-up times should be synchronised with the night bus network in such a way that for any locality with a
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direct night bus to central London there should be no more than a 30 min. interval between the departure of the last night bus and the departure of the first train.

- 3.5.3 For the benefit of both long-distance travellers and passengers visiting London for evening entertainment, last departures every day from London termini should be no earlier than **0030 to stations in the Zones** and **2400 to other LTUC area stations**<sup>4</sup>
- 3.5.4 Orbital services should have first and last train times synchronised with those on radial routes.
- 3.5.5 For engineering work issues arising from first and last train policy see Appendix 1. It should be noted that most London routes requiring particularly intensive maintenance are either four track or have closely parallel lines (e.g. Lea Valley / Southbury Loop).

### **3.6 Night Services**

- 3.6.1 All operators should consider running a 24-hour service, at least between Central London terminals and key interchange stations, particularly on multi-track and bi-directionally signalled routes where trains can operate around maintenance work.

### **3.7 Journey Times**

- 3.7.1 The target maximum journey time between the appropriate central London terminal and all stations in the zones should be 30 minutes, achieved as appropriate by a mixture of fast/semi-fast services from more distant stations and all-stations services in the inner area.
- 3.7.2 For LTUC stations beyond the zones the target journey time should be equivalent to 60 mph average speed.

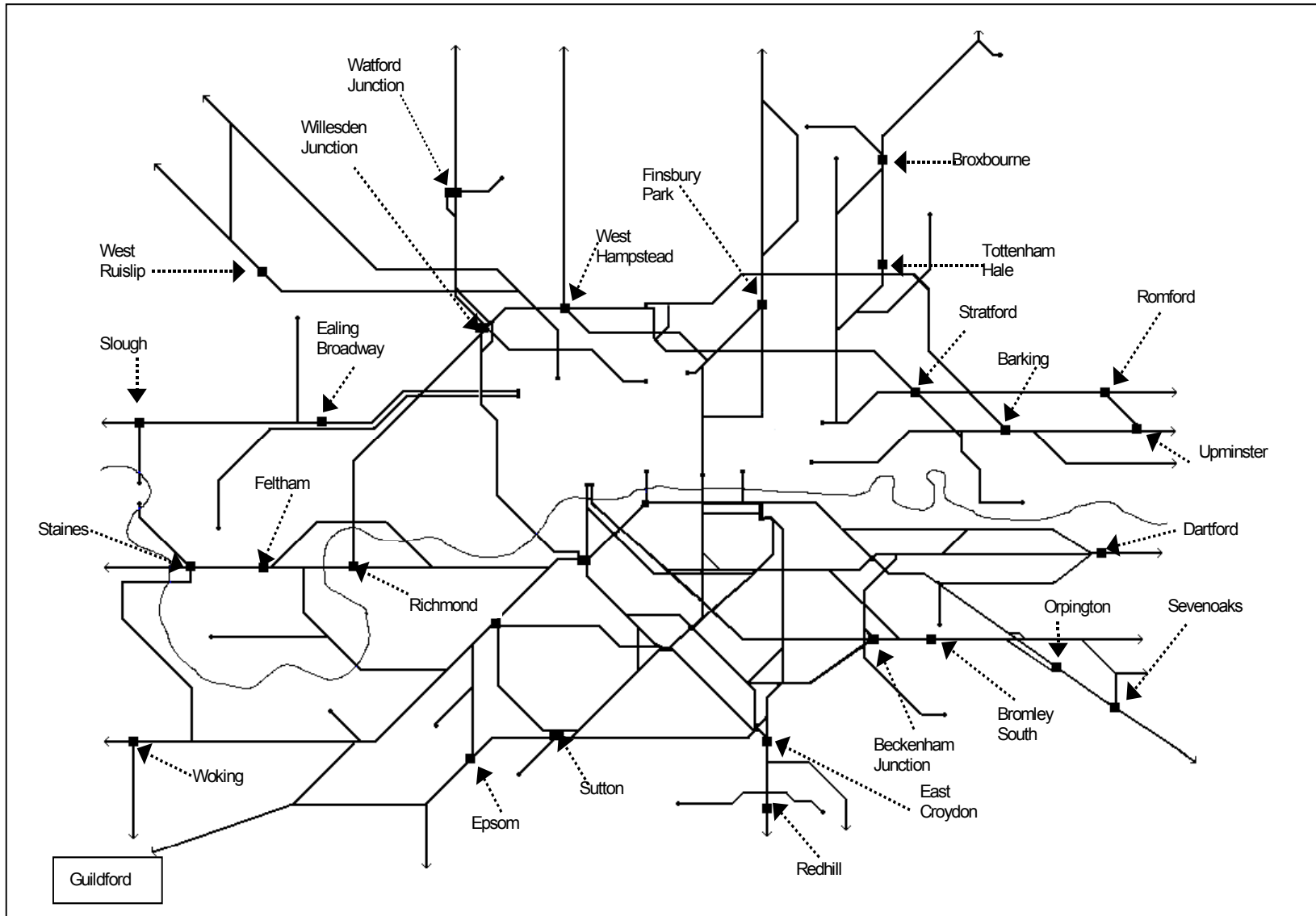
### **3.8 Interchange and Connections**

- 3.8.1 Good inter-operator and inter-modal interchange is essential between all National Rail operators, LUL, DLR, Tramlink and bus services, focusing on key interchange locations that offer convenience and frequency to the passenger. Integration of ticketing outside the Travelcard Zones should be a priority, and also within the Zones for ordinary (i.e. non-period) fares.
- 3.8.2 Key interchange locations, which are particularly important for making non-central London journeys without having to travel via the central area, include the stations shown in Figure 4.

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<sup>4</sup> On New Year's Eve services within the LTUC area should be extended by at least one hour.

**Figure 4 : Key interchanges**



- 3.8.3 Key interchanges should also include good links with the Croydon Tramlink, Docklands Light Railways and bus services.
- 3.8.4 In outer areas where train services are less frequent, interchange with buses should be well co-ordinated.

### **3.9 Airport Services**

- 3.9.1 All airports with direct rail access should be served by rail services at all times when flights (including night flights) are scheduled and should cater for the needs of airport workers.
- 3.9.2 Broadly this means that existing night services to Gatwick and Luton (including through services on the Thameslink core) should continue to operate, and services to Stansted should be increased as necessary in line with earlier and late flight times.

### **3.10 Leaf fall season**

- 3.10.1 In the short term, on sections of line where autumn leaf fall is a problem, the principle of re-scheduling trains to depart slightly earlier (or arrive slightly later) than normal is accepted in the interests of maintaining overall service punctuality on the London network.<sup>5</sup>
- 3.10.2 However in terms of integrated transport this practice is undesirable as it risks disrupting both rail-rail and bus-rail connections. In the longer term the industry is therefore expected to find environmental and technical solutions so that timetable adjustments of this type are no longer necessary.

### **3.11 Bank and Public Holidays**

- 3.11.1 The full Saturday service should operate.<sup>6</sup>

### **3.12 Christmas Eve**

- 3.12.1 Services should operate until the normal daily finishing times.

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<sup>5</sup> However the practice of some operators in simply adding time between the penultimate stop and the terminus (or issuing a general declaration that all trains will arrive at the terminus later than normal) is deplored as this provides no passenger benefit and can only be seen as an attempt to massage the punctuality statistics.

<sup>6</sup> Bank and Public Holiday services at present are a complete hotchpotch with different operators providing Sunday services, Saturday services and special services. This destroys connections between different operators' services and makes it very difficult for passengers to understand what services are available. System-wide standardisation on Saturday services should be an immediate priority for the industry. The only exception should be for operators whose Saturday services presently finish earlier than on Mondays – Fridays (e.g. GNER and Virgin West Coast); in these cases services should be extended to normal Monday – Friday finishing times to cater for late evening travellers.

### **3.13 Christmas Day**

- 3.13.1 All airport routes should operate train services as appropriate to flight times.
- 3.13.2 Within the Zones, rail operators should work in conjunction with TfL to operate a day-long co-ordinated rail and bus network to provide a limited but strategic service across London. Each route should operate at least every 30 mins. This special Christmas Day network should be extended to serve other principal LTUC area stations at least hourly. Rail tickets should be valid on appropriate bus routes.
- 3.13.3 LTUC and TfL London Buses are producing a joint study of the demand for Christmas Day services and services around the Christmas period.

### **3.14 Boxing Day**

- 3.14.1 All airport routes should operate train services as appropriate to flight times.
- 3.14.2 Within the Zones, trains should operate at a minimum of 2 tph with normal Sunday start and normal daily finishing times. The presumption should be that all stations should be open; where operators consider that any station should be closed this should be a matter for consultation with LTUC. This special Boxing Day timetable should be extended beyond the zones to serve other principal LTUC area stations at least hourly.

### **3.15 27<sup>th</sup> – 30<sup>th</sup> December**

- 3.15.1 Services should operate as appropriate to the day of the week. Where an assessment of employers' intentions shows that the full Monday – Friday peak services are not required, there should be a consistent policy throughout the LTUC area as regards the level of peak services to be operated. As with Bank and Public Holiday services, standardisation between operators should be an immediate priority for the industry.
- 3.15.2 Special events, such as horse racing meetings and football fixtures, should be taken into consideration when planning services.

### **3.16 New Year's Eve**

- 3.16.1 On New Year's Eve, services within the LTUC area should be extended by at least one hour after midnight to allow passengers to travel home safely. These services need to be adequately publicised by the provider well in advance of New Year's Eve.

#### 4. JOURNEY OPPORTUNITIES TO/FROM STATIONS OUTSIDE LTUC AREA

4.1 Except as regards frequency, services to and from stations outside the LTUC area should be organised on the same principles listed for journeys within the LTUC area. Particular attention is drawn to Sunday first arrivals in London from long distance origins such as Penzance, Plymouth, Swansea, Preston, Scotland; these should be no worse than 2 hours later than on weekdays (*the present practice with first arrivals often after 1200 and for some places much later is quite inappropriate*).

4.2 As a minimum, sufficient longer-distance services should call at key interchange stations in the LTUC area in order to provide the following:

- a) Out and back day return journey opportunities
- b) Out and back longer-stay journeys using reduced-price tickets such as Saver, SuperSaver and Apex on both weekdays and for 'Friday out - Sunday return' journeys, with travel times suitable for leisure travellers, e.g. departures between 1000 & 1400
- c) Avoiding the need to double-back via London terminals

4.3 Key interchanges for passengers travelling between LTUC area stations and places outside the area include:

<b>Barking</b>	for Essex – North East and North London via the Gospel Oak Line – District Line
<b>Bishops Stortford</b>	for Cambridge and East of England
<b>Bromley South</b>	for Kent Coast services
<b>Clapham Junction</b>	for Watford via West London Line – the north via West London Line and Reading - south coast – Salisbury / Exeter / Bristol – all stations on London orbital routes
<b>East Croydon</b>	for south coast - cross-London via Thameslink - Watford via West London Line
<b>Gatwick Airport</b>	for south coast
<b>Luton / Bedford</b>	for East Midlands and South Yorkshire
<b>Reading</b>	for West of England and South Wales
<b>Redhill</b>	for East Croydon, Tonbridge, Reading and north via Guildford
<b>Slough</b>	for Oxford / Worcester – Gloucester / Cheltenham - Bristol - South Wales - West of England
<b>South or West Ruislip</b>	for Banbury and the West Midlands

<b>Stevenage</b>	for North East and Scotland
<b>Stratford</b>	for East Anglia and Europe via the Channel Tunnel (key connection point from / to Docklands)
<b>Watford Junction</b>	for Midlands, North West and Scotland
<b>Woking</b>	for Portsmouth - Bournemouth / Weymouth – Salisbury / Exeter -Bristol

## **5 FREIGHT**

- 5.1 Although LTUC is primarily concerned with passenger services and related infrastructure, we recognise that efficient movement of freight by road and rail is vital to the economy of the London area. Accommodating freight on the capital's busy road network is becoming increasingly difficult and the switch of freight from road to rail must be critically addressed.
- 5.2 The difficulty of running more freight trains on heavily used passenger routes is understood, but any reduction of passenger services to enable freight capacity to be increased could not be supported. Nevertheless in the context of the SRA's Capacity Utilisation Policy, the sensible approach must be to consider the investment needs of passenger and freight trains together. The desirability of expanding rail freight services by improved signalling, crossovers, relief routes and terminal availability should be taken into account when planning for improved passenger services.



## **6. CONSULTATION PROCESS**

### **6.1 General**

- 6.1.1 LTUC considers train service matters through its Rail Timetables Sub-Group. All material should be addressed to:

Committee Administrator  
LTUC  
6 Middle Street  
London EC1A 7JA  
Telephone 020 7505 9000  
Fax 020 7505 9003  
E-mail [committeeadministrator@ltuc.org.uk](mailto:committeeadministrator@ltuc.org.uk)

- 6.1.2 It is not necessary to send timetable correspondence to any other LTUC officer. The Committee Administrator will ensure that information is passed as necessary to LTUC members and staff.
- 6.1.3 The Sub-Group meets approximately monthly. Therefore a minimum of five weeks should normally be allowed for a response to correspondence. If a quicker response is necessary, the operator should contact the Committee Administrator to make special arrangements. Urgent matters can be considered at small meetings involving LTUC officers and Committee Members.
- 6.1.4 Where a particular train operator deals with an RPC Joint Sub-Committee, LTUC will copy its responses on timetable matters to the Secretary of the Joint Sub-Committee.
- 6.1.5 If an operator considers that it would be useful to attend a meeting of the Rail Timetables Sub-Group, the Committee Administrator will be pleased to make arrangements. The Sub-Group welcomes periodic discussions with operators regarding general train service policies.

### **6.2 National Rail**

- 6.2.1 Train Operators<sup>7</sup> should:
- a) Inform LTUC of proposals to be tabled at the Annual Timetable Conference<sup>8</sup>
  - b) Discuss these proposals in advance of the conference if they involve significant changes to the pattern or structure of their services<sup>8</sup>
  - c) Inform LTUC of 'as bid' proposals to Network Rail

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<sup>7</sup> Including Heathrow Express and Hull Trains

<sup>8</sup> Proposals can be considered in confidence if necessary. Arrangements for this should be discussed with the Committee Administrator.

- d) Discuss with LTUC any significant changes (e.g. rejected bids, deleted calls or timing variations of 10 mins. or more) between 'as bid' and final decision
- e) Supply full timetable print (or electronic copy), as per franchise agreements, as early as possible<sup>9</sup>.

6.2.2 In addition, train operators are expected to comply with any consultation procedures specified by the Strategic Rail Authority.

### **6.3 London Underground & Docklands Light Railway**

6.3.1 LUL and DLR are requested to:

- a) consult LTUC regarding significant timetable changes in sufficient time to enable the proposals to be modified.
- b) supply details of all new timetables.

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<sup>9</sup> Although not specified in franchise agreements, it is helpful if operators can provide a summary of changes between 'old' and 'new' timetables. Where services are little changed this will be acceptable in lieu of a full print, provided the latter is available on request.

### ENGINEERING AND MAINTENANCE

#### 1 Introduction

- 1.1 LTUC's view of maintenance possessions on Network Rail focuses on the needs of passengers, including the need for National Rail to play a full part in an integrated transport system for London and the surrounding area.

#### 2 General requirements

- 2.1 The Network Rail network should be available to provide the maximum possible service to passengers whilst allowing sufficient – but no more than sufficient – time for maintenance.
- 2.2 LTUC recognises that in the short term there is a problem with overcoming maintenance arrears, so movement towards greater track availability will need to be a phased process.
- 2.3 We also recognise that there is a need to maintain the railway for higher performance standards than hitherto. However we do not automatically accept that this means that possession times must be increased or even remain as generous as they are. We believe that the route to higher performance should lie in:
- higher quality equipment
  - Duplication of critical items so that one equipment failure does not stop the trains.
  - Better automated monitoring so that equipment deterioration can be more accurately tracked and action taken before it fails.
  - Better design so that as much equipment as possible can be maintained by easy component replacement, with any time-consuming repairs being carried out away from the track.
  - More productive use of possession time.
- 2.4 Based on this philosophy we believe that it should be practical for maintenance to move towards the system successfully used by LUL<sup>\*</sup> and DLR, whereby there is a short overnight closedown of around 4 hours (approx. 0100 – 0500, but varying according to precise location and the needs of the passenger service) with an additional 2 hours (i.e. 0100 – 0700) on Sunday mornings. We understand that a similar system is used in Japan.

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<sup>\*</sup>Critics of this system could point to LUL's worsening track and signalling failure rate, but we believe that this is largely due to the fact that for some 30 years renewals expenditure has been insufficient to properly maintain the assets. Although similar funding problems afflicted British Rail, the long term effect was different because they were able to make savings by reducing capacity – an option that was never open to LUL.

- 2.5 Where four tracks (or more) are available, we would expect overnight possession arrangements to be flexible enough to enable all-night services to operate where appropriate. In certain special cases where there are only two tracks, we would look to the provision of bi-directional signalling to permit night time operation, e.g. for airport services.
- 2.6 We accept that special possessions would still need to be taken for major renewals. As now, these should be considered on their individual merits as to whether the work should be divided into a series of short possessions or one extended blockade.

### **3 Routine maintenance possessions**

- 3.1 Authorised maintenance times should be based on LTUC's train service requirements, as described in this paper, (see section 3).

### **4 Special possessions**

- 4.1 Where special possessions are planned, i.e. for work which cannot be completed during normal maintenance possession times, the industry should make its plans on the (rather obvious) basis that people who buy rail tickets expect to travel by train. The hassle, discomfort and delays caused by replacement road services are so great that even quite long diversionary rail routes are preferable.
- 4.2 Particular care needs to be taken to avoid closing alternative parallel routes at the same time e.g. Liverpool St. – Southend and Fenchurch St. – Southend, or Liverpool St. – Norwich via Ipswich and via Cambridge. Also, more imagination needs to be used when identifying alternative routes, e.g. using Paddington, Kensington Olympia and / or St. Pancras if Euston is closed rather than using road transport to Watford; if this means greater traction flexibility and special arrangements for route knowledge, then so be it.

### **5 Rail replacement bus services**

- 5.1 LTUC is producing a report specifically on rail replacement bus services looking at the services and identifying 'best practices'. The authors have identified below the initial key findings to be included in this paper. Where bus substitution is required due to engineering work the following code of practice should be observed:
- Adequate and prominent publicity to be disseminated at least ten days in advance and on the day, on websites and both on the route and on lines connecting with it (even if the latter are run by a different TOC or by LUL);
  - In the former Network South East area, the practice of displaying, at all stations, a weekly network wide map of engineering disruption should be resumed;
  - The equivalent London Underground notice should be displayed at 'Network' stations and the 'Network' map at Underground stations;

- Low-floor fully accessible buses to be used (except for long journeys where coaches are required, in which case special arrangements should be made to assist disabled and luggage laden passengers);
  - Adequate number of buses to match the train loading patterns of the services including facilities for luggage, buggies and cycles to be provided;
  - Temporarily closed stations to be clearly identified as such, with the replacement bus timetable clearly displayed with clear directions to the bus stops;
  - Bus stopping points to be clearly marked by temporary bus stop signs, so that passengers and drivers alike know where these are and to prevent disputes;
  - Buses to display destinations and intermediate calling points clearly on the front of the vehicle;
  - Sufficient staff to be provided at all affected stations to direct passengers to buses and trains. Staff should be fully briefed on all aspects of the disruption, especially on alternative services and ticketing availability – normal and substitute ticketing.
  - Where interchange between buses and trains takes place at stations with automatic ticket gates, the gates either to be powered down or configured to ensure that all tickets are returned to the passengers. If gates are not powered down, adequate staff to be provided at the gate line to direct and assist passengers with luggage etc. to use the manual gate;
  - Timetables of the replacement bus services should be available at all stations and on the replacement bus stops.
- 5.2 Only established bus companies to be used, with drivers who have the necessary local knowledge and ability to follow the route.

### Route Supplements

Over the course of 2003 the current document will be supplemented by individual route supplements. These will show the extent to which present services comply with the requirements set out in this paper and will include suggestions on how progress should to be made towards closing the gap between present provision and LTUC requirements.

The following are the route supplements that shall be released throughout 2003.

- Fenchurch Street
- Liverpool Street
- Kings Cross / Moorgate
- St Pancras / Thameslink North
- Euston
- Marylebone
- Paddington
- Waterloo
- Victoria / London Bridge (South Central/Thameslink South)
- Victoria / Blackfriars (South Eastern)
- Charing Cross / Cannon Street
- Orbital Routes
- Docklands Light Railway
- London Underground

**CONSULTATION RESPONSES FROM ISSUE 1**

The following parties submitted responses with regards to Requirements for Train Services – Issue 1. Most of these related to specific routes, and LTUC will take them into account in the route supplements to be produced by the end of 2003.

- Abbey Flyer Users' Group – Robert Bolt, Secretary
- Chiltern Railways – Stuart Yeatman, Business Planning Manager
- Ealing Passenger Transport Users Group – John Beeston, Chairman
- East Surrey Passengers Committee – Peter Appleford, Secretary
- Kingston University – John Lindsay, Reader in Information Systems Design
- London Lines – Clive Tilley, Commercial Director
- Mole Valley District Council – Jack Straw, Senior Planning Officer
- Orpington District Travellers' Association – David Daters, Chairman
- Reigate and Banstead Borough Council – David Hurdle, Senior Transportation Officer (Policy)
- RPC North East England – John Morton, Member.
- Slough Borough Council – Chris Boylan, Head of Transportation Policy
- South West Trains – Rufus Boyd, Commercial Director
- Strategic Rail Authority
- Tandridge District Council – R.W.Evans, Director of Environmental Protection
- Transport for London – Ian Brown, Managing Director of Rail Services
- Wessex Trains – Charles Belcher, Managing Director
- Professor Jack Richardson, previously co-convenor Hertford North Loop Rail Users' Group
- Mr Philip Godfrey

## MIRROR IMAGE TIMETABLES

Whilst many British timetables are more or less regular interval, most have different patterns in each direction.

One consequence of this is that where a journey requires a change en route, the connection may be good in one direction but bad in the other.

If we take two journeys, each involving one change, we can find that:

- A - B has a fast journey time outward (say a 10 min. connection) but a slow time for the return (say a 40 min. connection)

whereas

- A - C has a slow time outward but a fast return

The result is that where prospective passengers have a choice between train and car, they will chose car for both journeys and rail gets nothing.

The remedy is for timetables to have the same pattern in both directions - known as 'mirror image'. This results in connection times being the same both ways. It may not be possible for all connections to be good, but the mirror image principle forces the timetable compiler to make informed choices of which connections should have priority. Many factors will affect this choice, both commercial and operational.

In our theoretical example there are four possible outcomes:

1. A - B and A - C both good
2. A - B good, A - C bad
3. A - B bad, A - C good
4. A - B and A - C both bad

In case 1, people chose rail for both journeys (100%)

In cases 2 & 3, rail gets 50%

In case 4, rail gets 0%

This is a 'no lose' situation for rail.

Rail wins if the timetable compiler can achieve 1, 2 or 3, and is no worse off compared with the present if he can only achieve 4.

Mirror image is not new to Britain. The Waterloo - Bournemouth line off-peak service was timetabled on this principle from electrification in 1967 until quite recently, and there are a few localised examples around the country. It is one of many issues being examined by a study (supported by DTR, Railtrack and ATOC) of applying Swiss timetabling methods (Taktfahrplan) to the British network which is due to report during 2003.



Press release issued by the Institute for Transport Studies

25 June 2002

### **Achieving integrated transport through timetabling**

Integration in transport can mean many things, but one aspect that most people would say is vital yet poor in practice is the coordination of timetables between the various services. Too often, trains do not connect with other trains, let alone with buses. And the timetables themselves are so complex that only experts can understand them. A research study is now looking at the merits of a different approach.

The University of Leeds and consultants, with the support of the railway industry, have joined together to research the case for introducing a version of the Swiss Taktfahrplan system in Britain. Its main features are

- that all public transport operates as a cycle of services that repeats itself every hour throughout the day and on every day of the week – which makes timetables simpler and easily memorised;
- that express, regional and local services are related to each other at junctions in the best possible way across the whole country - and for all modes: trains, buses, ships; and
- that planning is led by the principal railway authority but involves many other operators, together with bodies representing users.

The study is part of the LINK Future Integrated Transport Programme sponsored and funded by the Engineering and Physical Sciences Research Council [EPSRC] and the Department for Transport. This brings together teams comprising academic and industrial partners to examine innovative ideas that could deliver improvements in the integration of transport in order to benefit the quality of life and the performance of the economy.

#### **The Project**

The Project is entitled "Measuring demand for an integrated inter-urban public transport network". The collaborating partners are

- the Institute for Transport Studies at University of Leeds [ITS]
- Passenger Transport Networks, based in York [PTN]
- Eden Business Analysis, also in York
- Railtrack
- the Association of Train Operating Companies [ATOC]
- SMA of Zurich, Switzerland.

The aim of the research is to design a timetable for the national rail network in Britain, including associated bus services, that follows the principles adopted in Switzerland. This will then be tested against the existing timetable to see whether introducing it has the potential to attract travellers out of their cars and bring wider social benefits.

Although the Strategic Rail Authority, Railtrack and the Train Operating Companies are encouraging the Project it is totally independent in its freedom to start with a clean sheet of paper in planning services. This is enabling the researchers to review the utilisation of tracks and the pattern of services from first principles, and its conclusions might suggest that revenue and social benefits would result from radical changes. It is expected that the results will be debated with interested groups early in 2003, and the Project will report by the end of 2003. Only when the findings have been considered will there be any question of the industry partners endorsing them.

ITS is one of the leading centres of academic research in transport in Britain, with a record of distinguished work in rail studies. PTN and Eden are specialist consultancies whose principals both have a railway background, while Professor Chris Nash at ITS and Jonathan Tyler of PTN, the Project Manager, were both at one time British Rail Lecturers (at Leeds and Birmingham Universities respectively). SMA is the firm that has developed the Viriato timetabling software used by Swiss Federal Railways and many other administrations in mainland Europe.

#### **For further information please contact**

Professor Chris Nash,  
Institute for Transport Studies 0113 343 5337 [cnash@its.leeds.ac.uk](mailto:cnash@its.leeds.ac.uk)

Jonathan Tyler,  
Passenger Transport Networks 01904 611187 [jtyler@ptn.globalnet.co.uk](mailto:jtyler@ptn.globalnet.co.uk)

## OTHER LTUC PUBLICATIONS

### Publications directly relevant to train service provision

**Which Street for Southend?** - The choice of terminus for c2c late evening trains (LTUC, December 2001)

**There's more to Chiltern than the Chilterns** - The case for the Chiltern Metro (LTUC, January 2001)

### Other publications

**All Aboard** - LTUC's submission to the Greater London Authority's scrutiny of 'Priority Bus Issues for London' (LTUC, March 2001)

**Crossing the Border** – A study of cross-boundary bus services (LTUC, December 2000)

**Easing the Trip** – Addressing the needs of disabled rail users (LTUC, March 2001)

**Going Underground** – LTUC's submission to the Greater London Authority's scrutiny of 'The Tube – Moving On' (LTUC, October 2001)

**Good riddance to bad rubbish** – A guide to getting litter cleared from railway land (LTUC and RPC network, December 2002)

**Inconvenience** – A survey of lavatory facilities at London railway stations (LRPC, 1994)

**London for the Continent** – Public toilets at transport interchanges (LTUC, January 2003)

**London on the Move** – Transport policies for a liveable city (LTUC, March 2002)

**Who goes home?** - A study of last trains from London (LRPC, April 2000)

**The South London Overground** – The case for enhanced suburban rail services (LRPC, July 1998)

**Organising National Rail in London** – A statement of evidence from LTUC to the Greater London Authority's scrutiny of mainline rail services in London (LTUC, January 2002)

**Major Rail Construction Schemes in London** – Results of a public consultation exercise (March 1997 & March 1998)

**Reaching the Skies** – Policies for surface access to London's airports (LTUC, February 2002)

**Times Tables** – Making sense of when and where trains run (LTUC, March 2002)

**Transport for all?** – Dial-a-Ride and Taxicard users speaking (LTUC, May 2003)

**What do Passengers Want from Public Transport in Outer London?** – A note to the Greater London Authority's scrutiny of public transport in outer London. (LTUC, November 2001)

**Where am I?** – Street name signs in London (LTUC, May 2003)

**Yours Disgusted, yours Delighted** – Case studies in complaint handling (LRPC, March 2000)

**To receive a copy of any of the listed publications please contact Suzanne Fry at LTUC on 020 7505 9000 or email [publications@ltuc.org.uk](mailto:publications@ltuc.org.uk)**