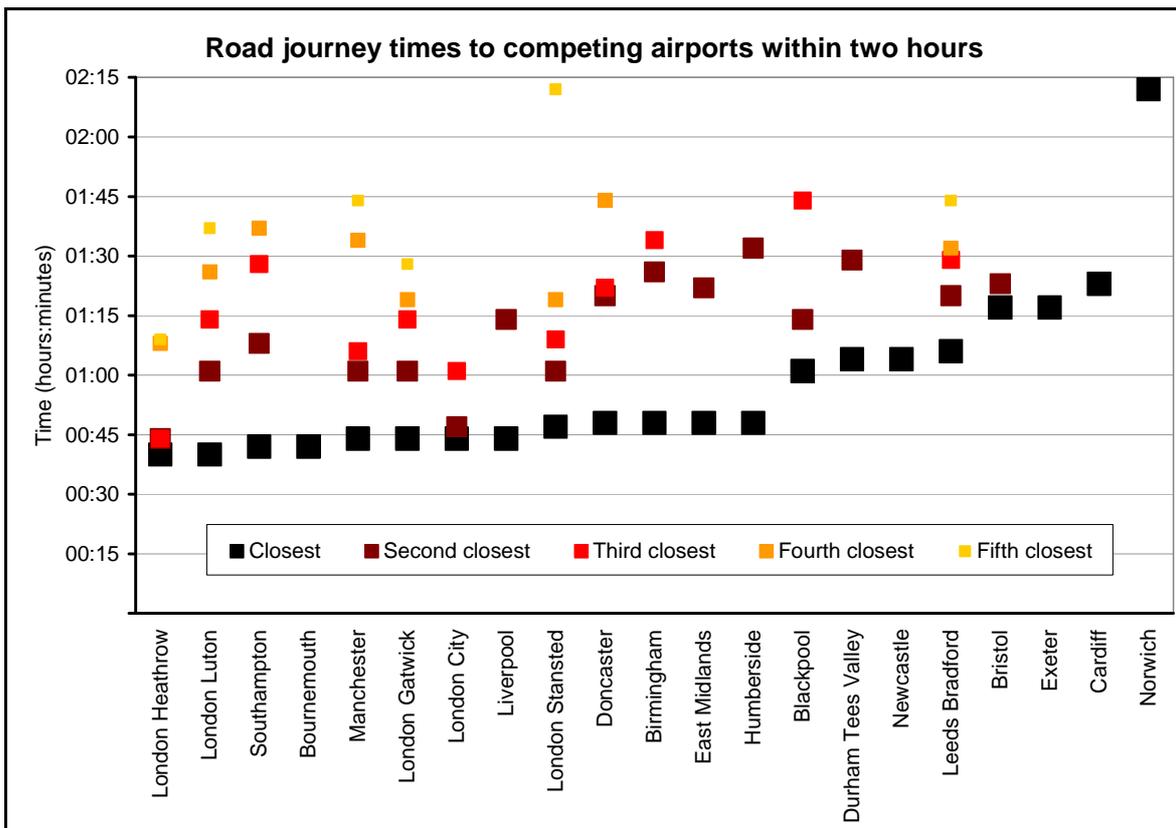


# The Transport Economist

The Journal of the Transport Economists' Group



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# The 2008 Periodic Review: context, decisions and implications

Paul McMahon

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Arup

25 March 2009

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## BACKGROUND

Tom Worsley introduced the speaker, noting that regulators had a “glamorous” job, determining allowable revenue, which had an immediate impact on the bottom line of the regulated business. However, they worked in public and were open to challenge, and many people were paid to challenge them.

Paul confirmed that evidence of the process, and the responses to consultation on it, are all publicly documented on ORR’s website.

He began by summarising the main purpose of the 2008 periodic review (“PR08”): specifying Network Rail’s outputs and the access charges and other income it would need to fund them. The meeting was particularly timely as the principal output, October 2008’s “Determination of Network Rail’s outputs and funding” for Control Period 4 (<http://www.rail-reg.gov.uk/upload/pdf/383.pdf>), would come into force a few days later, on 1 April 2009. This document, extending to 447 pages, set out what Network Rail is required to deliver over the coming five years.

## THE OFFICE OF RAIL REGULATION

Paul briefly summarised the role of ORR, which is independent of both Westminster and Edinburgh governments and acts as the economic and safety regulator in relation to the railway. Its key responsibilities include:

- **Safety** legislation
- Determining **access charges** for given **outputs**
- **Monitoring and enforcement**

- **Access and licensing**, approving or directing access agreements, which if needed it can impose on the industry
- **Competition law**

Its many statutory duties, set out in Section 4 of the Railways Act 1993 and subsequent amendments, now include:

- **Promoting improvements** in rail performance and efficiency
- Promoting **competition**
- **Not making it unduly difficult for Network Rail to finance its activities**
- Having regard to the Secretary of State's and Scottish Ministers' **guidance and funding**

## **THE INDUSTRY STRUCTURE**

Following the Railways Act 1993, Railtrack was created in April 1994 and the principal components of the industry – infrastructure, rolling stock, and operations – were privatised from 1996. There have been a number of developments since then, including growth in passenger demand, the Hatfield accident, the collapse of Railtrack, the creation of Network Rail, a Company Limited by Guarantee (CLG), and reorganisation of the industry, with the demise of the Strategic Rail Authority (SRA). The fundamentals are therefore as follows.

First, **vertical separation**, with:

- Network Rail, infrastructure manager since 2002, which can borrow to fund its expenditure. Network Rail has debts of around £20 billion which are expected to rise to around £30 billion during CP4. The company benefits from a financial indemnity from the government for its debts.
- The rolling stock companies (ROSCOs), owners of the majority of the rolling stock.
- Around 20 franchised train operators (“railway undertakings”), 6 freight operators and a number of open access passenger operators.

Second, **independent economic regulation** of Network Rail, using the “RPI-X” incentive-based approach employed in other regulated sectors.

Third, involvement of government through:

- Significant net subsidy to the industry.
- Specification and contracting of passenger services as a franchising authority.
- Following tensions between regulatory independence and government expectations of sovereignty in budgeting for funding levels, new processes for conducting access charge reviews through the High Level Output Specifications (HLOSs) and the Statements of Funds Available (SoFAs), through the Railways Act 2005.

## **ACCESS CHARGES REVIEWS AND PERIODIC REVIEWS**

ORR establishes Network Rail’s outputs, and efficient access charges (or network grant, paid by government, in lieu) for them, at an access charges review or periodic review. Charging periods to date are summarised in the table below.

*Table 1: railway industry charging and Control Periods*

<b>Dates</b>	<b>Charging basis</b>
April 1994 – March 1996	Railtrack’s “vesting charges”
April 1996 – March 2001, CP1	Charges set before privatisation
April 2001 – March 2006, CP2	2000 periodic review
April 2004 – March 2009, CP3	2003 access charges review
April 2009 – March 2014, CP4	2008 periodic review

The 2003 access charges review resulted in a significant increase in funding to Network Rail to address the requirement to deal with an increased level of renewals and the backlog that built up under Railtrack’s stewardship. During CP3 Network Rail has generally performed “pretty well”, in line with the expectations at the 2003 access charges review: performance has increased, asset stewardship has improved and costs have been reduced.

In conducting PR08, ORR led an industry-wide review to determine:

- Network Rail's outputs: principally capacity, reliability and safety
- Network Rail's revenue requirements and the sources of this funding (including access charges, network grant and other income, such as from property rental and sales)
- The wider regulatory framework, including industry contractual and incentive arrangements

All of the above constitutes a coherent "package" of decisions.

ORR's overarching aim for PR08 is to "Ensure an outcome that delivers a railway that is safer than ever before, more reliable than ever before, whilst carrying significantly more passengers and freight, at a cost that represents ever better value for money for users and taxpayers".

Any periodic review process typically lasts more than two years, with the charges and outputs set for the duration of a five-year Control Period. PR08 lasted around three-and-a-half years, with the additional time taken to deal with the new statutory requirements (based on the HLOSs/SoFAs) which was being undertaken for the first time. Key dates in the PR08 process are set out below.

*Table 2: key dates in the PR08 process*

<b>Dates</b>	<b>Activity</b>
2005, August	Process begins. ORR published its initial consultation document
2006, October	Network Rail produces “Initial Strategic Business Plan” (ISBP) setting out its initial plans for expenditure and outputs and including a list of proposed schemes
2007, February	ORR published its “Advice to ministers and framework for setting access charges”. This document set out the key elements of the regulatory framework and ORR’s view on the ranges for Network Rail’s revenue requirement in CP4, based on its assessment of the ISBP, provided to assist government in preparation of the HLOSs/SoFAs
2007, July	Governments publish HLOSs and SoFAs
2007, October	Network Rail produces its “Strategic Business Plan” (SBP) to deliver governments’ HLOSs
2008, February	ORR published its “Update on the framework for setting access charges and assessment of the SBP”
2008, April	Network Rail produces its “Strategic Business Plan update”
2008, June	ORR publishes its “Draft determinations” for consultation
2008, October	ORR published its “Final determination”
2009, March	Network Rail produces “Delivery plan” which set out in detail what it will do to deliver ORR’s determination during CP4
2009, April	CP4 begins

Paul noted this is a significant programme of work, and that the process involves extensive consultation, in particular a standard three-month consultation on its draft determinations “which ruined many people’s summer holidays”. In reaching its final determination, ORR has:

- Conducted the review transparently and with extensive consultation.

- Taken account of both governments' HLOSs and the assumptions on public funding (SoFAs).
- Improved the regulatory framework.
- Undertaken thorough and detailed assessments of Network Rail's plans, and itself conducted extensive work, using internal staff and consultants. In particular, ORR carried out extensive international benchmarking to help identify the efficient costs of Network Rail's activities.
- Considered carefully all the representations received. Paul said that there had been over 100 responses from interested parties to its draft determinations, and "hundreds" of comments on local schemes, such as its decision not to fund redoubling of the line between Swindon and Kemble.
- Taken into account conditions in the financial markets. Conditions had been benign early in the review, but the economy and conditions in financial markets had been worsening ahead of ORR completing its final determination in October 2008. For example, Network Rail is not able to issue unsupported debt at the current time.

## **ORR'S DETERMINATION**

The key outputs established in ORR's determination cover network enhancements, improvements in reliability, improvements in safety and reductions in disruption.

The determinations provide for a huge programme of network enhancements, costed at £7.6 billion, more than twice the level in CP3. These included numerous projects to expand and improve the network to provide capacity for around 20% more passenger journeys and to make improvements for freight services. The main enhancement schemes are:

- Increased capacity on Thameslink
- Major improvements at the key nodes of Reading and Birmingham New Street stations
- In Scotland, a new line from Airdrie to Bathgate, and Glasgow Airport Rail Link (GARL)

- On the East Coast Main Line (ECML), replacement of overhead line equipment (OHLE) and capacity enhancements
- Extensions to more than 500 platforms to accommodate longer trains
- Line speed improvements on the Midland Main Line (MML)
- The national stations improvement programme (NSIP)
- The strategic freight network (SFN) initiative
- A Network Rail discretionary fund (NRDF) for small enhancements
- A “seven-day railway” initiative to reduce disruption at weekends

In addition to these enhancements, Network Rail is required to provide improvements in:

- Reliability, with the Public Performance Measure (PPM) to reach 92.6% and freight delays to be reduced by 25%
- Safety, with a 3% improvement required over CP4
- Disruption, with a 30% improvement for passenger services and no worsening for freight required over CP4

ORR had also concluded that there was substantial scope for improvements in Network Rail’s efficiency, by at least 21% by the end of CP4 compared to 13% proposed by Network Rail.

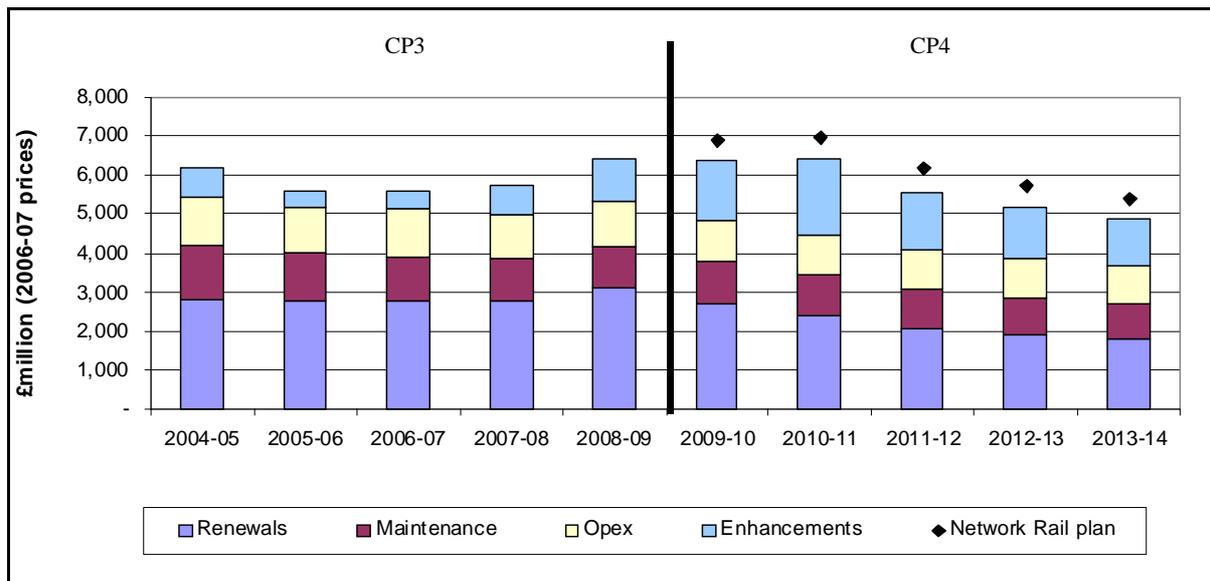
All of the outputs could, at these efficiency levels, be achieved within the funding commitments (SoFAs) from the governments.

In summary, Paul said that the determination is a challenging and achievable package, which provides the opportunity for Network Rail and the industry to build on their successes during CP3.

## **EXPENDITURE**

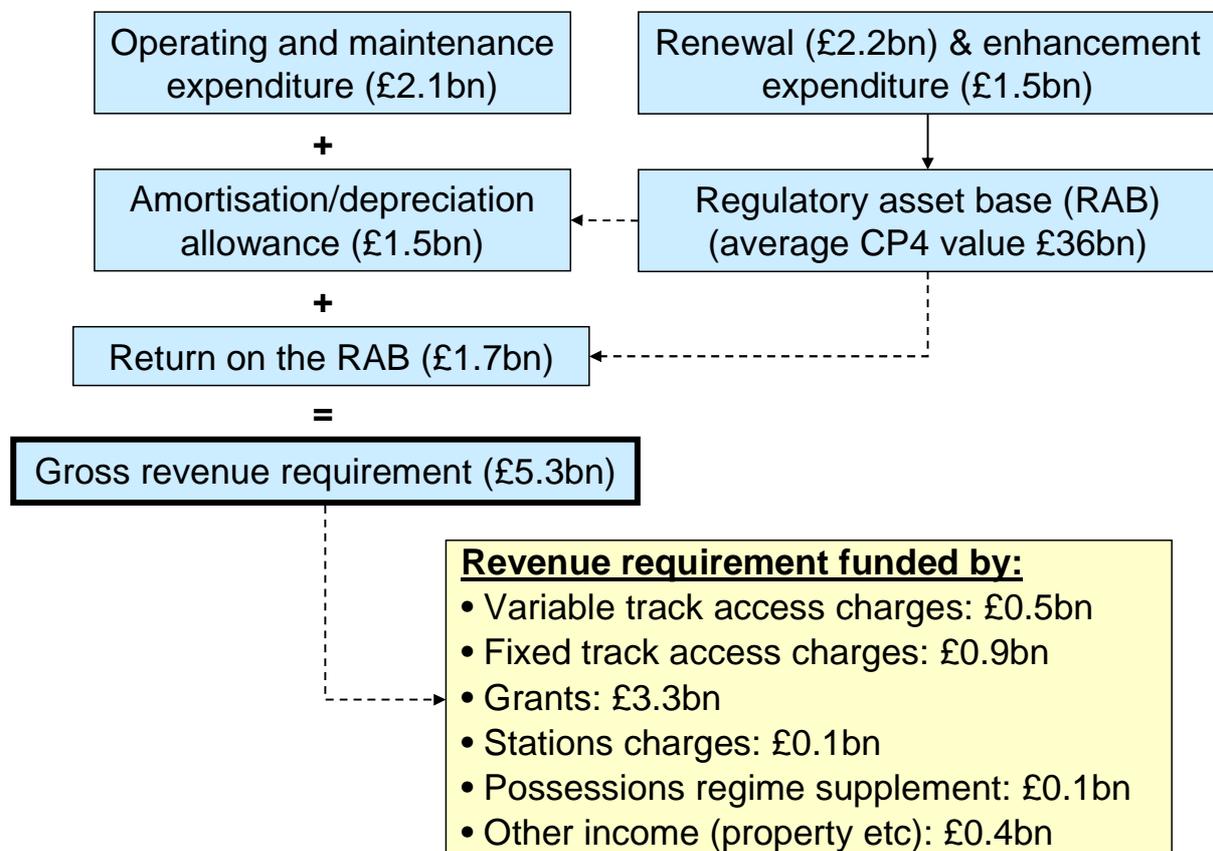
ORR considered that Network Rail will need £28.5 billion, including £7.6 billion on enhancements, to operate, maintain, renew and enhance the network in CP4, £2.6 billion less than Network Rail proposed and less than the £29.5 billion in CP3 (all in 2006/07 prices). The attached chart shows the projected expenditure trend.

Figure 1: Network Rail historic and projected expenditure



The pick up at the end in CP3 was caused by deferral by Network Rail in the early years of CP3, and Paul noted that Network Rail had already announced some deferrals of work from 2009-10 to later in CP4.

The “building blocks” of the annual average revenue requirement, at 2006/07 prices, during CP4 are shown below.



Variable track access charges (VTAC) are the only element of Network Rail's income which varies directly with levels of use. However, and unlike the assumptions in 1994 that Network Rail would be funded entirely by access charges, grants dominate the overall funding, as government, since 2004, has asked ORR if it would approve the substitution of a proportion of Network Rail's fixed track access charges by an exactly equivalent amount of network grant. This is done to help government accounting: government accounting rules state that access charges paid by train operators to Network Rail (some of which are supported by government subsidy) must be accounted for as current expenditure, whilst payments to Network Rail can be accounted for as capital investment. The level of grants is determined by ORR, with reference to government accounting rules, which place an effective ceiling on the level of fixed charges that can be converted to grant.

## **KEY CHALLENGES**

Paul listed a number of key challenges for Network Rail and the industry in delivering the determination during CP4.

Network Rail would need to deliver a huge investment programme on time and to budget without compromising safety or performance.

It would need to implement new technologies and working practices to achieve or outperform the expected efficiency improvements. This would also involve making organisational changes without harming safety or performance.

Network Rail would need to improve its partnerships, to facilitate effective and efficient delivery. There is an "efficiency benefit sharing mechanism", so that out-performance can be shared with the passengers and freight operators (although this has not yet been implemented in full).

There were also challenges for – in due course – Network Rail's plans for unsupported debt issuance, and the impact on the industry of the recession, with its associated risks for Network Rail's revenue from property and income from retail activity on stations (as well as on the industry more widely).

## **CHALLENGES FOR THE 2013 PERIODIC REVIEW AND THE LONGER TERM**

Paul outlined a number of longer term challenges that can already be highlighted for Network Rail and the industry.

As well as delivering during CP4, Network Rail will also have to plan for the longer term, to accommodate Crossrail, ERTMS, further electrification and potentially High Speed 2, bearing in mind the uncertainty in long term demand forecasts and against the backdrop of the recession.

Further ongoing improvements are also to be required, including in safety and reliability (and it becomes progressively more difficult to approach “100%” PPM), asset management, efficiency and value for money. ORR also wants to see increased focus on customers, and further emphasis on the optimal use of capacity, and sustainability. Will the incentives be strong enough?

## **CONCLUSIONS**

In conclusion, Paul said that:

- ORR’s determinations are a challenging and achievable package that delivers a bigger better railway at an affordable price
- The package is good news for train operators, passengers, freight customers and the taxpayer
- The determinations provide the opportunities for Network Rail and the industry to build on their successes in CP3
- The long term looks positive for rail, with significant growth projected, but this will have to be catered for at better value for money

Throughout CP4, ORR, amongst other things, will monitor and enforce PR08 delivery, health and safety, improve the industry framework and plan and deliver PR13.

## QUESTIONS

**Stephen Glaister** (Director, the RAC Foundation) thought that the process was “incredibly impressive” with a proper debate about who pays for what. Things were much better than in 1993, for which much credit was due to John Swift. Roads “would die for this kind of clarity”. His question related to unsupported borrowing: how would this work, and why would it not inherently be ultimately supported by government? Could debt be ring-fenced? Paul said that the unsupported debt proposals do not plan for it to be ring-fenced, and under the proposals Network Rail would not be allowed to borrow any more on a supported basis, so it would need to raise money on an unsupported basis. Robert Cochrane noted that there had been similar issues in Asia, where railway debt was seen as government-backed. Dick Dunmore (Steer Davies Gleave) wondered whether the taxpayers would be benefiting if lenders’ margins assumed that taxpayers would stand behind Network Rail’s unsupported borrowings when in practice they would not.

**Nigel Harris** (The Railway Consultancy) wondered how ORR could tell if Network Rail’s performance was improving, benefiting from lower prices or even deflation, or merely doing nothing? Paul replied that Network Rail would be left to decide on what technologies and working methods it would deploy and how: ORR was indifferent to this as long as there was no compromise of safety or the sustainability of the asset base over the longer term. Network Rail has published asset policies, by which it needs to abide, and Condition 1 of its licence (previously Condition 7 before the licence was revised) requires “asset stewardship” according to best practice asset management principles. In PR08 ORR also took into account the prices of Network Rail’s inputs and input prices for renewals will be indexed during CP4: if they are greater than assumed in PR08 there will be a RAB addition and if lower a RAB reduction.

**Robin Whittaker** had two questions. First, how did ORR measure human capital, which had “haemorrhaged” when Railtrack was set up, and did it expect to see progress? Paul said that ORR strongly supported Network Rail initiatives on training and other development. Second, was ORR’s analysis of the strategic business plan top down or bottom up? Paul said that ORR used both approaches in the assessment of Network Rail’s Strategic Business Plan. ORR did a lot of efficiency benchmarking, set out in Chapter 7 of the determination. While the different approaches and studies using econometric analysis produced slightly different results, they all pointed in the same direction and allowed a generally robust conclusion to be drawn that Network Rail was 30-50% less efficient than the leading rail infrastructure managers in

Europe. ORR also did lots of bottom-up work (to corroborate the top-down work), identifying techniques that could be applicable to many of Network Rail's activities. ORR took a cautious view of the benchmarking work and assumed that Network Rail could catch-up two-thirds of the gap to the leading companies during CP4. ORR concluded that 21% efficiency improvement in CP4 was appropriate, which was conservative and well-justified.

**Robert Cochrane** (independent consultant and Imperial College) said that when rail restructuring had begun in the 1990s a French consultant had told him that it was a very valuable experiment, but he was glad that it was being done in Great Britain. Robert thought that the model was flawed, but was very impressed with the regulator. However, he was not convinced on the currently horizontal separation, which he thought would be better as line of route, and felt that there was scope for longer franchises which could own their own rolling stock. Paul pointed out that neither issue was within ORR's remit but noted that the Conservative Party had suggested that longer (or "evergreen") franchises might be better. Robert also asked what the evidence base from experience in Great Britain could tell others elsewhere. Paul noted that Deutsche Bahn had sponsored research work by the University of Toulouse, although this might be with an objective of justifying the vertical integration model in Germany.

**David Metz** (University College London) felt that much of what had been presented was about accounting and cost engineering: where was the economics? Paul responded that there was much economics in the bigger picture, such as the specification of the HLOSs and ORR's work on the structure of charges and incentives, in which reservation charges, capacity charges and the differences between short and long run marginal costs had all been examined. There was not time in this presentation to go through this in detail.

**Emily Bulman** (NERA) asked what flexibility Network Rail would have in the enhancements it delivered, especially if demand was lower than expected. Paul referred to Network Rail's Delivery Plan which would detail what it intended to do. It does, however, have scope to make changes, through a mechanism to move resources or defer projects as long as the overall outputs are met, e.g. in terms of provision of new capacity.

(Post-meeting note: on 31 March 2009 Network Rail published its “Control Period 4 Delivery Plan 2009” which can be found at <http://www.networkrail.co.uk/browse%20documents/StrategicBusinessPlan/Delivery%20Plan/2009/CP4%20Delivery%20Plan%202009.pdf>)

**Richard Davies** (ATOC) noted that the outputs are set, to a large extent, in the statutory HLOS documents. To what extent should ORR move into defining “what outputs”? Paul said that ORR had looked at this in considering which outputs were the most efficient means of delivering the Department for Transport’s HLOS, which generally specified ends, rather than means. Paul also mentioned that ORR had introduced a new output to measure disruption to passengers and freight from engineering work on the network. Stephen Glaister noted that other regulators specified outputs, and Paul gave the specific example of Swindon-Kemble redoubling, which Network Rail had proposed but which ORR did not view as providing an overall cost-benefit and be necessary to deliver the HLOS. Dick Dunmore, who had advised ORR in this area, elaborated that Network Rail’s ISBP had set out a long list of projects, not all of which were needed to meet the HLOSs, requiring a process to identify which combinations of schemes could most cost-effectively deliver the HLOS. Tim Griffiths of ORR confirmed that extensive work had been done in this area, and Paul reminded the audience that while the review dealt with specified final outputs such as delivery of schemes at Reading and GARL, it also had to find means of delivering aggregate increases in capacity. Finally, he noted that if Network Rail delivered the HLOS for less than £7.6 billion, less would ultimately be added to regulatory asset base, resulting in lower charges in future control periods.

**Stephen Glaister** asked how the process would fit in a “shiny new high speed railway”? Paul said that ORR would normally be expected to opine on the appropriate value of any RAB addition. Stephen asked if the government would pay the access charges. Paul noted that government might ultimately choose a different structure, but ORR’s view was that the independent regulatory model was the best and there would need to be a regulated access regime for any new high speed line.

**John Dodgson** (independent) asked about an asset register: had Network Rail established one, and had it been any use in PR08? Paul noted that Tom Winsor had made the creation of an asset register a licence condition, and Network Rail had made progress in this area, but there was further work to do. John asked for clarification on whether it had proved relevant in PR08, and Paul indicated that asset policies had

been important, even if they still largely only reflect what Network Rail does, rather than reflecting an economically optimum policy. Robert Cochrane recalled that BR's asset register had been poor, and suggested that experience of other industries was that they were not of much value until "95%" quality had been reached. He suggested that Tom Winsor had been right, but the benefits lay in the future, not in the past. Alan Peakall commented that lack of an asset register was not just a problem for the railways. Transport for London was only just establishing one for Croydon Tramlink.

**Gregory Marchant** (ex-BR and ex-SRA) suggested that a lot of small schemes can require disproportionate effort, taking lots of planning and costs. Did ORR look at the extended programme? Tim Griffiths confirmed that this had been looked at by ORR or its consultants. On platform lengthening, for example, this had resulted in a 12.5% "efficiency overlay" on Network Rail's cost estimates, based on bottom-up work envisaging a modular approach with programme management efficiencies. Gregory asked how this applied to individual small-scale capacity improvements. Paul recognised that this was a potential difficulty, and that Network Rail's Guide to Railway Investment Projects (GRIP) process was better suited to large projects than to small ones, although there was now a GRIP-lite process. ORR has tried to facilitate speedier delivery of small schemes, which in some cases are delivered by the TOCs: Network Rail can swap delivery with the TOCs if, for example, this is the best way to deliver the PPM.

**John Slaughter** (London Borough of Wandsworth) asked how much the PR08 exercise had cost? Paul replied that ORR had spent about £2 million but it hoped to save billions.

**Tom Worsley** ended by musing what was better about incentives on the continent, given the lack of a perceived need there for economic regulators. He noted that many questions had been very positive about the process, and that ORR seemed a good place to work.

Report by Dick Dunmore

# **The local bus industry current economic issues and future prospects**

Peter White

Professor of Public Transport Systems, University of Westminster

Arup

22 April 2009

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## **INTRODUCTION**

Peter began his talk by comparing the roles of rail and bus in Britain, where bus travel is more important than rail travel, which dominates less than in most other European countries. Rail's highest share is in London but, even there, twice as many passenger trips are by bus as on the London Underground. In other British cities, with much more limited rail provision and few light rail systems, there is greater dependence on bus.

The 2005 National Travel Survey (NTS) showed that only 20% of bus journeys, compared with 54% of rail journeys, were to or from work. The most common journey purpose of bus travel is shopping (29%) with the peak demand being driven mainly by education (17%).

Peter set out the basic definitions of bus and coach services.

Outside London and Northern Ireland:

- “Local” services are registered with the Area Traffic Commissioner, with fares set by the operator, and usually have a fixed route and timetable, although demand-responsive services are now included.
- “Other” (non-local) journeys are all other types, including scheduled express, excursions and tours, private hire and contract. There is no registration process and hence poor statistical data, making it difficult to analyse these services in detail.

In London, most services are operated on contract to Transport for London (TfL), with some other, mainly commuter and tourist, services operating on London Service Permits (LSPs) issued by TfL.

## **MAIN ELEMENTS OF COST STRUCTURES**

The largest element of the costs of local bus operation are:

- Labour (60-65%), of which drivers are the largest part, making costs largely time-based.
- Fuel (10%, after deducting Bus Services Operator Grant (BSOG), which rebates 80% of fuel duty otherwise payable).
- Historic depreciation (about 5-7%) although this does not generate sufficient funds for replacement with equivalent vehicles at current costs. Where a brand new fleet is operated, depreciation plus interest (or operating leases) forms a substantially higher proportion of cost than in the industry as a whole.

In deregulated areas, about 79% of bus-kilometres are run commercially – no specific support is needed after BSOG and concessionary fares compensation – and the other 21% are contracted by local authorities.

## **PRIVATISATION AND DEREGULATION**

Most operators are now owned privately, except in Northern Ireland, where approximately twelve are in public ownership. Blackburn and Eastbourne have recently been sold and some, such as Nottingham and Bournemouth (both with Transdev), are in mixed ownership.

The 1980 Transport Act removed price and quantity control of long-distance services and fares control of local services. The “quantity” element of local services was removed by the 1985 Transport Act, which became effective from October 1986. The main outcomes were initially:

- Sharp reduction in unit costs per bus-kilometre (about 45% between 1985/6 and 1999/2000 in real terms), largely due to reductions in staffing and an increase in driver productivity.
- Growth in bus-kilometres run, reversing the previous decline, often associated with minibus use at much higher frequencies.
- A general increase in real fare levels with the removal of subsidies, with competition being based on frequency rather than fares.
- Decline in use largely attributable to rising car ownership, and rising real fares offsetting growth in bus-kilometres.

- There was generally limited inter-operator “on the road” competition, which is now negligible in most areas.
- Fares competition was largely ineffective, due to the very low value of time needed to justify waiting for following bus. (There is similar evidence in the taxi market.)
- However, substantial competition remains for tendered services, comprising almost all routes in London.

In London, there were similar trends in unit costs and bus-kilometres run, but more recently demand has grown much more than in deregulated areas.

## TRENDS IN BUS USE

Peter presented two tables exemplifying the changes in bus use since 1985/6, the last full year before deregulation. Table 1 shows that:

- London had the largest increase in passenger trips
- Elsewhere, the real cost per passenger trip rose as loads declined

*Table 1: Change in local bus services in England, 1985/6 to 2007/8*

<b>Variable</b>	<b>London</b>	<b>PTE areas</b>	<b>Rest</b>
Passenger trips (boardings)	+89%	-42%	-16%
Bus-kilometres run	+74%	+5%	+42%
Real fare index	+53%	+94%	+30%
Real cost/bus-kilometre (at 2007/8 prices)	-30%	-39%	-34%
Real cost passenger trip (to 2006/7 only)	-30%	+10%	+6%

Derived from DfT Bus & Coach Statistics 96-97 and Statistics Bulletin SB(08)23

Table 2 highlights that the most severe problem for passenger trips has occurred in the English PTE areas, which showed a decline between 1999/2000 and 2007/8 compared to increases in all other areas. After a decline in the second half of the 1990, Scotland showed reasonably strong growth, most of it occurring around Edinburgh.

Table 2: Recent trends in bus use, million passenger trips

Region	1995/6	1999/2000	2007/8	Change 1999/2000 to 2007/8
London	1,193	1,294	2,090	+61%
English PTE areas	1,358	1,213	1,121	-8%
Rest of England	1,303	1,297	1,319	+2%
Scotland	506	455	513	+13%
Wales	130	117	122	+4%
GB total	4,489	4,376	5,164	+18%
GB total excluding London	3,296	3,082	3,074	~0%

There are both endogenous and exogenous factors influencing trends in bus use:

**Endogenous factors**, whose effects may be estimated by the following assumed elasticities (constant) from the Demand for Public Transport guide 2004:

- Service level +0.4 (short term) rising to +0.55 (medium term) (Service level is proxied by bus-kilometres)
- Real fares (index) -0.4 (short term) rising to -0.55 (medium term)

### Exogenous factors

- **Population:** small overall growth of 3% between 2001 and 2006, both in London and nationally, but decline in some older cities contrasting with 4% growth in inner London. In metropolitan areas there was an aggregate decline, but this was less than 1%.
- **Car ownership:** adding one car reduces bus trips per annum by approximately 300. In the six main English conurbations outside London, cars per household rose by 15% between 2000 and 2006. In London, however, there has been only very low growth since the mid-1990s (0.324 per head in 1996; 0.325 in 2001; 0.330 in 2006).

However, while car ownership is normally seen as an exogenous factor, the quality of the bus service could affect the decision to purchase a

second car. Lower car ownership in London could also be due to the far more extensive provision of evening and weekend buses.

Data on bus-kilometres run and real fare changes (average revenue per trip) and car ownership from 1999/2000 to 2006/7 show that:

- London ridership growth is much greater than “expected”
- The PTE areas’ decline is less than “expected”, especially in view of car ownership growth

## **FACTORS BEHIND HIGH GROWTH IN LONDON**

Peter suggested a number of reasons for the high growth in London:

- Quality of passenger information at stops, which receives a much higher rating in London than in other regions in the DfT national quarterly survey.
- Boarding time per passenger on buses, which is down to about two seconds per passenger in London, compared to about six where there is change-giving.
- Low-floor access, where the London fleet is now wholly low-floor, which contributes around 5% growth in ridership.
- More comprehensive Sunday/evening/all-night services in London.
- Speed/reliability gains due to extensive bus priority, red routes and congestion charging.
- The direct impact of congestion charging, although this only contributed about 6% of the 1999/2000 to 2005/6 growth in ridership.

**Profitability** varies between operators. Until the mid-1990s it was very poor, then it became much better, accelerating fleet renewal, but more recently it has fallen slightly and is now around 8-10% of turnover in London and among the larger groups in deregulated areas.

Where a substantial proportion of the assets are leased (as with the Train Operating Companies) a much lower margin is sufficient to give adequate return on capital, but a “safety margin” may still be needed to cover fluctuations in revenues and costs such as fuel.

## TRENDS IN COSTS

Between 1985/6 and 1999/2000, real unit costs per bus-kilometre fell by around 45%, but there has been marked growth since. This appears to have been due largely to growth in labour costs, the effects of congestion, and fuel and insurance costs.

*Table 3: cost (pence per bus-kilometre) (at 2007/8 prices)*

	<b>1999/2000</b>	<b>2006/7</b>	<b>Change</b>
London	192	258	+34%
PTE areas	113	152	+34%
Rest of England	99	114	+15%
All Great Britain	113	145	+28%

At the same time public expenditure has increased, as shown in Table 4.

*Table 4: Public expenditure in £m (at 2007/08 prices)*

	<b>1999/2000</b>	<b>2007/8</b>	<b>Change</b>
BSOG	407	487	+20%
Concessionary fares	570	1,039	+82%
Local service support payments (£650m of the £768m net growth is in London)	347	1,115	+221%
Statutory education travel		938	

Source: DfT Statistics Bulletin SB(09)08, Table 3.1

**Free concessionary travel** applies to the disabled with no time restriction and to those aged 60 and over after the AM peak. Prior to free travel, the typical pattern in England outside the major conurbations was a half-fare concession. Introduction of free travel has had the following effects:

- Growth in use by those previously holding a half-fare pass was broadly in line with observed elasticities ( ~ -0.3-0.4)
- Large growth in pass take-up in 2006, some 70% in a Salisbury district case study. New pass holders are typically from higher income, higher car-ownership categories and have much lower trip

rates but their volume in aggregate may explain much of net growth. Elasticities may appear to be higher where this is not taken into account, and elasticities have been derived solely from the overall percentage fare reduction and aggregate growth in trips.

- Further growth was seen from April 2008 with nationwide free use in England, especially in tourist-receiving areas. Between the last quarter of 2007 and the last quarter of 2008, total bus trips grew by 1.7% in England outside London and 3.0% in London, which also has free child travel.

Certain issues have arisen from free concessionary travel:

- Operator compensation is on a “no better off, no worse off” principle, based mainly on estimates of net revenue loss, and a small element of capacity costs.
- The overall level of compensation is probably about right, but there are issues of allocation by area, especially with relatively crude methods and little use of smartcard technology to apportion ridership.
- The assumption that growth is wholly “off peak” using spare capacity is not always valid, especially on some rural services using small vehicles.
- There is a social equity issue, as free travel applies to all, irrespective of income and whether still in employment. In contrast, high costs are incurred for “non-statutory” school travel by low-income families, but there is no national policy on child travel pricing.

## **FLEET RENEWAL**

There are two regulations about renewal of bus fleets:

- European regulations have imposed absolute limits on emissions for all new vehicles (Euro V from autumn 2009).
- All vehicles will need to be low-floor or wheelchair-accessible by specified target dates.

The overall renewal rate is satisfactory, but some operators with older vehicles need to accelerate renewal rates, by generating higher profit margins or use of operator leasing.

## ENERGY CONSUMPTION

Data from BSOG payments and bus-kilometres run enable overall consumption to be estimated, revealing:

- A marked deterioration in recent years, associated with the lower efficiency of “Euro” engines, increased vehicle size, and the relative growth in the proportion of kilometres run in London.
- Efficiency per passenger-kilometre is also affected by the poor average loads outside London. At average occupancies it is still better than car, but by a smaller margin than previously.
- To improve vehicular energy efficiency, average loads will need to be raised.

## COMPETITION IN THE BUS INDUSTRY

There has been increased concentration, with the five largest groups now representing about two-thirds or more of local bus markets by aggregate turnover. Even prior to this consolidation, there were dominant local subsidiaries in many areas, with most routes having only one operator.

The positive impacts of competition are lower unit costs, through competitive tendering, and some innovations, although in many cases these are not directly associated with inter-operator competition.

On the other hand, negative impacts occur, through the lack of coordination on timetables and ticketing, and through short-run competition being aimed only at the Monday-Saturday daytime market, with neither operator making adequate long-run profits.

Peter described two competition case studies based on recent events in Eastbourne and Oxford.

In **Eastbourne** the long-established municipal operator experienced both managerial and financial difficulties and competition from local newcomer, Cavendish Motor Services, a subsidiary of Renown Coaches, running Monday to Saturday daytime only. The municipal operator was sold in December 2008 to Stagecoach, who also acquired Cavendish in January 2009 with a plan to close it down as a separate operation and provide a single network. OFT is investigating but, if neither operator could maintain long-term viability, it could be argued

that the most sustainable outcome could be an integrated network run by a single operator.

In **Oxford** there is high bus use, aided by local policies of traffic restraint, Park & Ride and bus priority and operator innovations. Virtually uniquely, competition exists on almost all main routes, between two main operators, Stagecoach and Go-Ahead. There is, however, a local perception of problems (congestion and pollution) caused by “too many” buses in the city centre, that may lead to future exclusions. The operators have proposed to use the Local Transport Act 2008 to introduce a “Statutory Quality Partnership” (SQP) with the local authority, enabling coordination of services and greater joint ticketing. For example, two uncoordinated 10 minute services could be replaced by a single 7 minute service, giving similar passenger waiting time with fewer buses and reduced dwell times in the centre.

The Transport Act 2000 introduced “Statutory Quality Partnerships” following existing voluntary Quality Partnerships, but local authorities could not specify fares or service levels. Only one was put in place, in Dundee. There are many non-statutory Quality Partnerships (QPs), although First Group has now withdrawn from the Sheffield QP.

The Local Transport Act 2008 allows some policy options with reduced emphasis on competition for its own sake, avoiding the previous conflict between government’s transport and industrial policies. Quality Partnerships now have firmer obligations, for example regarding minimum service levels and fare increases, and there have been changes to competition law: changes in fares and/or services through a Voluntary Partnership Agreement (VPA) or a SQP are now subject to a qualifying agreement. This will provide scope for testing the Quality Contract (QC) concept outside London, to resolve ongoing debate. If QCs are introduced, extreme cases will need to be avoided, and tests made of a broadly representative sample of areas, with systematic monitoring to understand the effects.

## **CONCLUSIONS AND FUTURE PROSPECTS**

In recent year there have been encouraging trends in reducing unit cost per bus-kilometre and, with ridership growth in some areas, decline is no longer “inevitable”. There are still issues of high public spending and the need to contain unit costs, especially per passenger trip, by improving efficiency and increasing average loads.

## DISCUSSION

**Martin Crookston** (Tribal Group plc) opened the discussion. What comes across is “what does competition mean to the long-suffering British public?” The theme is that some does help but some doesn't. There was a lot in the presentation for strategic thinking. If the decline continues, should we think about introducing London-style bus tendering?

**Derek Scrafton** (University of South Australia) was interested in the changes in trip length. Peter said that National Travel Survey (NTS) gives some information, which shows a fairly stable average in recent years, giving similar trends in passenger-kilometres and trips. He also noted that in London there were many bus-to-bus transfers.

**Robert Cochrane** (Imperial College) congratulated Peter on producing the evidence to answer so many of the long-standing questions. There is much evidence that local single operators have the benefits of scale and scope – should we have London-style arrangements or a national regulator? Peter noted that there is already some regulation and that the traffic commissioners, who look at safety, also recently looking at quality. Some control is also exercised by DfT, the Competition Commission, and local authorities, through tendered services. Peter thought that the case for a national regulator was not comparable to that for rail because of local circumstances.

**David Metz** (University College) had looked at the NTS, which showed that total travel had been constant in London, with increases in public transport use and a decline in car use. This trend is helpful for sustainability, but has implications for modelling, since car use had been predicted to increase substantially. Peter noted that some increase in total London car ownership had occurred but this was pro rata to population. Paul O'Sullivan (DfT) stated that forecasts perform reasonably well overall, but there are things going on in London that are not fully understood. This is partly because the costs of car use had risen: speeds had fallen because capacity had been removed. Peter suggested that there is a need for a good index of the costs of car use. For example, work in Australia had shown a relationship between the costs of car use and public transport modal shift, a case for studies in more depth.

**Paul O'Sullivan** (DfT) commented on the big impact of concessionary fares with much higher elasticities ( $>1$ ); bus emissions of CO<sub>2</sub> per person-kilometre are now worse than car; and profit margins in PTE

areas give a high return on capital. Peter's view was that with privatisation, the depots went with the operator, therefore limiting market entry, notably in London.

**John Cartledge** (London TravelWatch) commented that there had been consolidation post-privatisation. Do the brands – some garish and other understated – reflect their characteristics? Peter noted that the most striking is Go-Ahead, which maintains local branding devolved to local managers. Stagecoach is one of the more innovative.

**Eileen Hill** commented on Welsh concessionary fares. Six month before-and-after studies had showed complex changes. In the big cities where there was a high take-up of half-fare passes, the high trip rates rose slightly, while in suburbs and country areas the number of passes rose much more. Peter's view was that this confirmed concessionary fare trends elsewhere. Short- and long-term effects can be very different, making it difficult to see general trends against a high variability.

**Derek Scrafton** commented that the product needs improving, citing the Australian example of different weekend and evening frequencies. Peter replied that some operators outside London are putting back evening and weekend services.

**John Bates** was interested in standard elasticities and thought it was difficult to distinguish growth in trip numbers and trip length. For car trips, the trip length effect is much greater than the trip numbers effect. Peter replied that most bus service and fare elasticities were derived from operator-reported trip totals. He had used NTS as a broad check on trip length. There was some evidence of elasticities varying with trip length.

**Michael Spackman** (NERA) thought that the difference between London and the PTE areas is so striking that the government is at long last making a decision. Who is making a case against the London system? Peter noted that the latest Act is moving away from a purist view of competition, and policy is being made on the basis of facts.

Peter White was thanked for such a comprehensive review of the current trends in the bus industry.

Report by Laurie Baker

## REFERENCES

Further details of the work discussed can be found in:

*Factors behind bus patronage trends in Britain and their implications for future policy*, International Journal of Transport Economics February 2009, Volume XXXVI, pages 13-31 (mainly regarding London)

*Factors affecting the decline of bus use in the metropolitan areas* is available via [www.pteg.net](http://www.pteg.net)

*Impacts of free concessionary travel in English rural regions from April 2006* (with Stuart Baker) in Proceedings of Sixth Transport Practitioners' Meeting, Reading, July 2008.

## UPDATE

Since the talk, there have been further developments in both Eastbourne and Oxford.

In Eastbourne, Stagecoach duly rationalised the former municipal and Cavendish operations into a single network. However, an Office of Fair Trading report published in early June indicated its concerns about the resulting reduction in competition, leading to a referral to the Competition Commission (for a detailed review, see "Coach and Bus Week" 10 June 2009, pages 26 and 27). In response, Stagecoach pointed out that previous competition was unsustainable and that investment has taken place new vehicles.

In Oxford, the local authority has pressed ahead with moves to restrict buses in the city centre, prior to a voluntary agreement being put in place. This will result in buses being unable to serve some major stops in the bus/pedestrian Queen Street, in the principal shopping area (see "Local Transport Today" No 519, 8 May 2009, page 9).

Peter White, 6 July 2009

# **The airport industry in a competitive environment: a United Kingdom perspective**

David Starkie

Economics Plus Limited

Arup

27 May 2009

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This talk was an updated version of OECD Discussion Paper No. 2008-15 given in October 2008 by David Starkie in Paris, downloadable from [http://lysander.sourceoecd.org/vl=8099736/cl=13/nw=1/rpsv/workingpapers/20708270/wp\\_5kzbxtcm4hmr.htm](http://lysander.sourceoecd.org/vl=8099736/cl=13/nw=1/rpsv/workingpapers/20708270/wp_5kzbxtcm4hmr.htm).

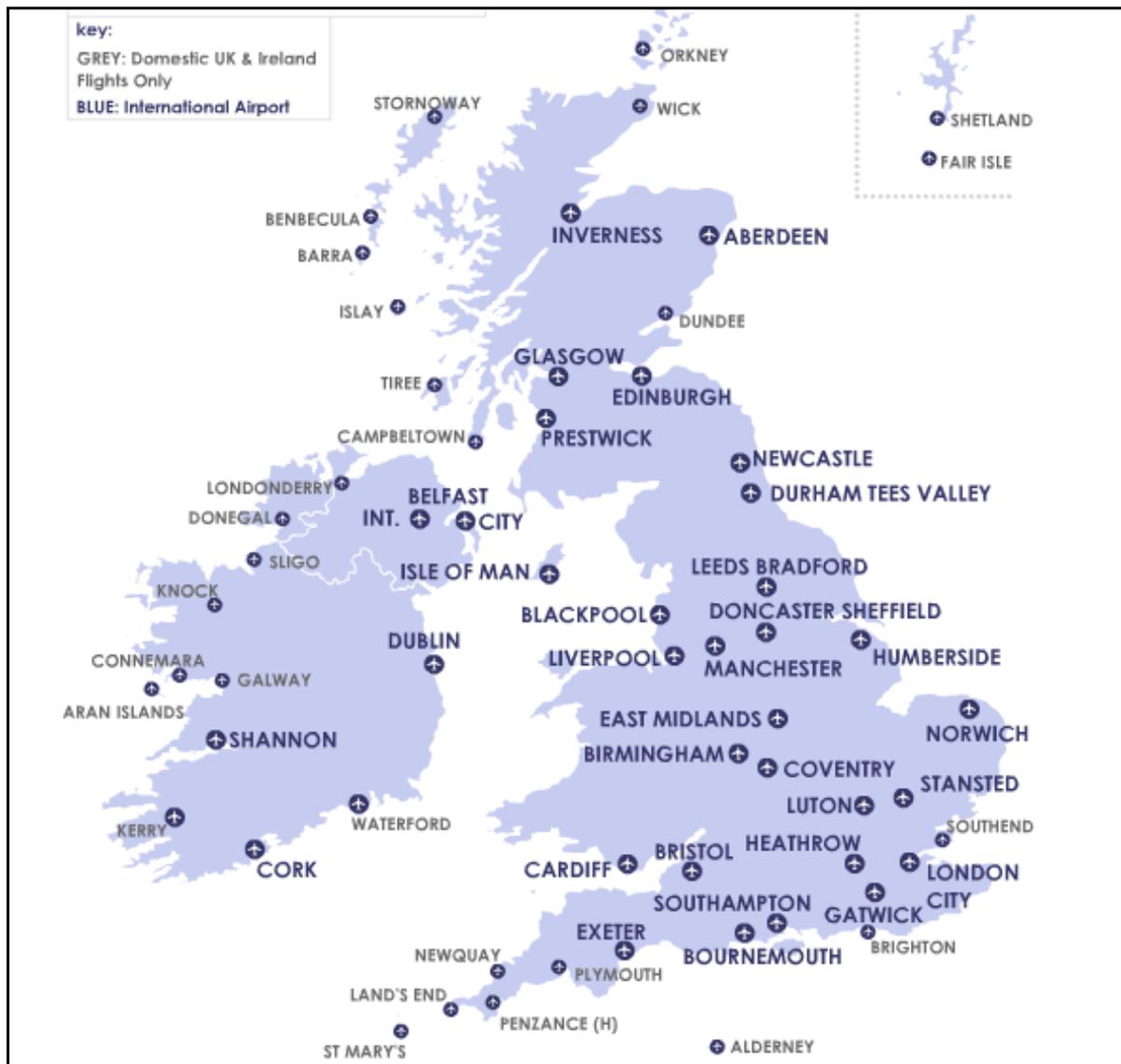
## **PREFACE**

To illustrate the diverse nature of the air transport industry, David began his talk by showing an amusing video taken on a Southwest Airlines internal US flight. This showed a member of the cabin crew giving passengers the pre-take-off information and safety briefing in the form of a rap record.

## **INTRODUCTION**

There are around 50 airports in the UK plus another 10 in the Republic of Ireland. The following map shows the location of commercial airports with passenger services in the UK and Ireland, and clearly illustrates the large number and their proximity to each other.

Figure 1: Commercial airports in the UK and Ireland

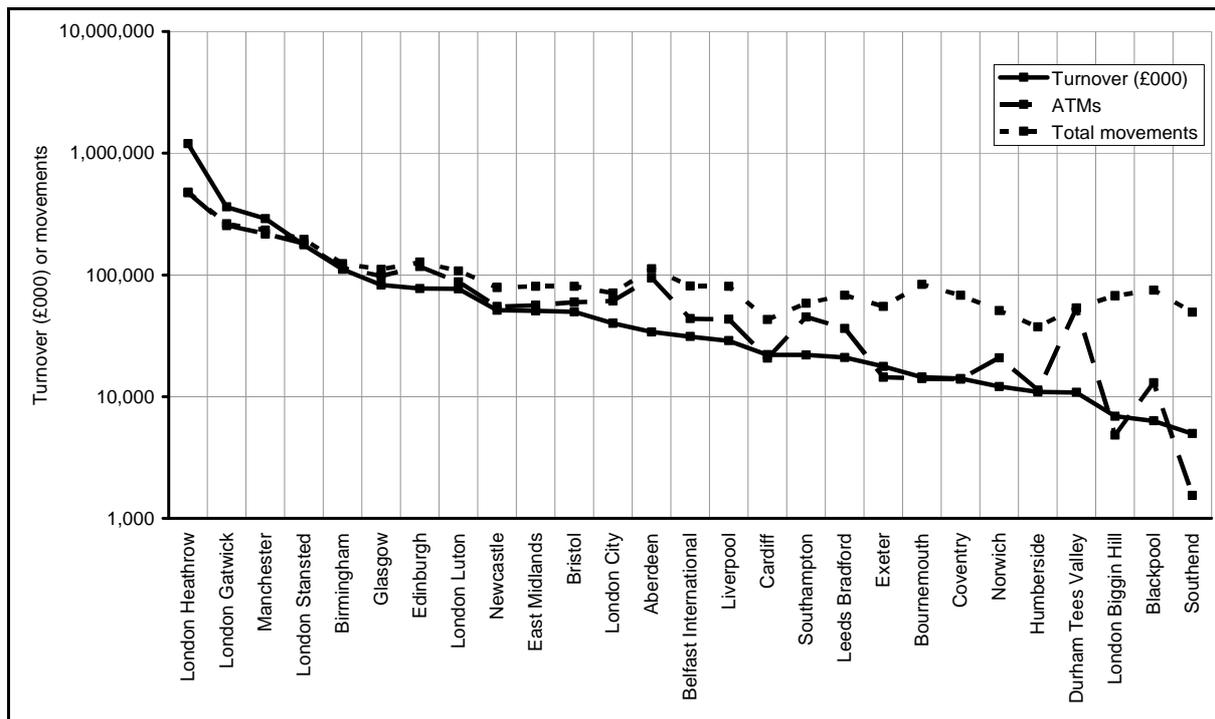


(Gloucester, Lydd, Guernsey and Jersey are omitted from the map. Coventry no longer has any regular services.)

Airports are often thought of as highly capital intensive enterprises. However, expensive infrastructure and facilities are not always needed. For example, Plymouth airport manages with a runway even shorter than London City, Lands End airport only has a grass strip, and at Barra the aircraft land on the beach.

Figure 2 shows how airports operate at all points on a wide range of different scales. The sample airports range from £1,200 million to £5 million turnover (240 to 1), 470,000 to 1,500 air transport movements (ATMs) (300 to 1) and 480,000 to 37,000 total movements.

Figure 2: airport turnover and movements



Source data for Figure 2 are attached as Annex A.

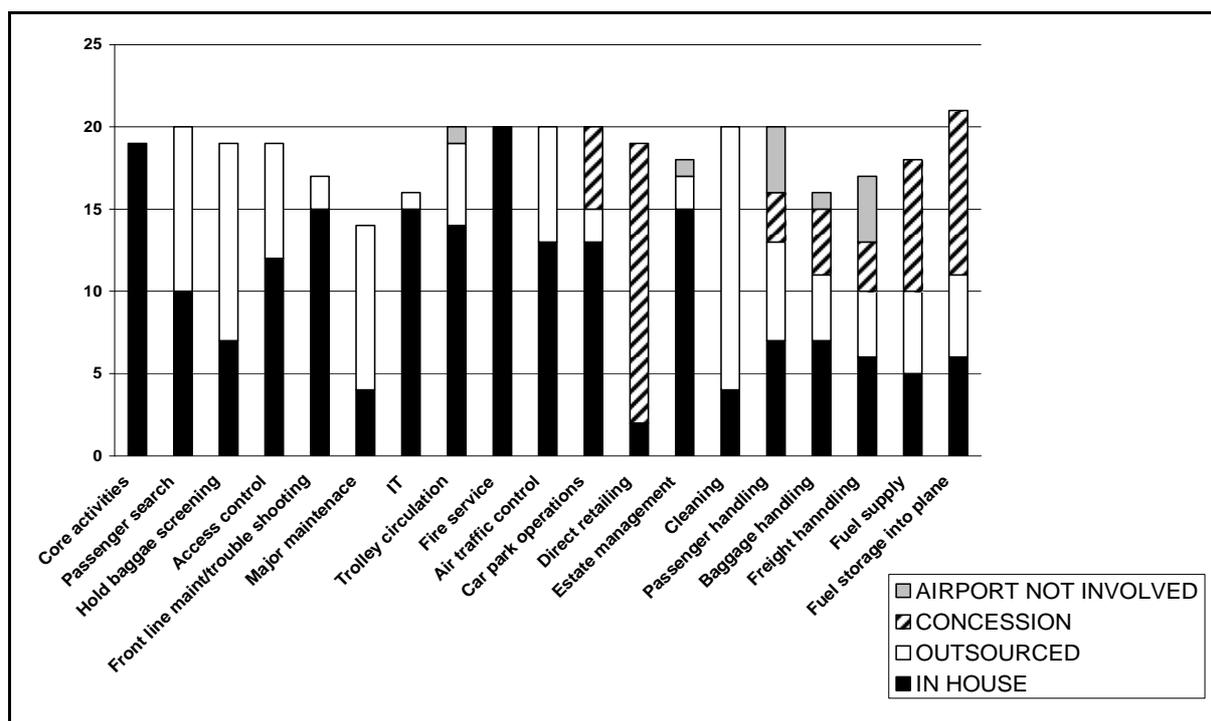
## MULTI-ACTIVITY ENTERPRISES

Airports can more properly be regarded as multi-activity enterprises, with facilities structured to meet the size and requirements of their customers. In addition to the needs of commercial scheduled and charter passenger flights, airports may provide facilities for freight transport, corporate jets, air taxis, aero clubs, police and security services, and/or aircraft maintenance. Larger customers may be operating short-haul or long-haul flights; they may be low cost carriers or full service (legacy) carriers.

To remain profitable, privately owned and operated airports must adjust their asset base to reflect their income streams. A not atypical “Small and Medium Enterprise” customer was illustrated by the photo of a hut-like building at Exeter used by a local flying training company. Tenants at airports can even include light industry or general storage companies not directly related to air transport.

Big differences are also to be found in the extent to which airport operators perform particular activities in-house, outsource them or offer them as a concession, as shown in the chart below. These differences in approach are not necessarily a function of the size or ownership structure of the airport.

Figure 3: airport activities



## FINANCE AND OWNERSHIP

The best measure of the size or scale of an airport is its financial turnover. However, because of the commercially confidential nature of the information, only limited data is publicly available. Data on turnover, air traffic movements and other movements for 28 UK airports is shown in Figure 2 and Annex A. In addition there are probably another dozen UK airports with a turnover greater than £5 million per annum for which data is not available. Total turnover for UK airports is estimated at around £3.25 billion per annum.

Ownership of UK airports is a mix of public and private, although most are privately owned. The most notable exception is Manchester Airport Group (MAG) which is entirely owned by Manchester City Council and neighbouring local authorities. In addition to Manchester airport itself, MAG also owns East Midlands, Bournemouth and Humberside airports. The other significant exception to private ownership is in Scotland, where most of the Highlands and Islands airports are publicly owned.

Within the private sector there is a considerable amount of trading in airport assets. Recent examples include Belfast airport, bought by ABN/AMRO in September 2008, and Southend airport, bought by the Stobart Group in December 2008. London Gatwick has been put up for sale by BAA and bids are being invited for Coventry by its current

owners. In terms of economic theory, such trading should help to improve the productive efficiency of these assets.

## **THE SUPPLY CHAIN**

EU policy on the liberalisation of air transport has had a profound impact over the last decade or so. A well documented result of this policy has been the appearance of low cost carriers such as easyJet in 1995 and Ryanair in 1992. (Although the latter was founded as a full service carrier somewhat earlier.)

More recently the policy has caused a revolution within the EU in the nature of the supply chain for downstream airport customers. Previously, airports would publish tariffs for landing charges and other activities, together with standardised Terms and Conditions. Airlines were deemed to accept these charges and conditions simply by virtue of their agreeing landing slots. Now the tendency is for airlines and airports to negotiate individual supply contracts.

Another result of liberalisation has been that the low cost carriers tend to view their market on a pan-European basis, seeking to base their aircraft where they are likely to generate the best return. These airlines have therefore increased their negotiating power over the airports, leading to competition between airports for contracts and to act as bases for low cost operations. The legacy carriers have also benefited from this re-balancing of power through a general reduction in airport charges as a result of competition.

Thus there is now an asymmetry of commercial negotiating power between airports and airlines. Airlines can readily switch their capital assets (i.e. aircraft) between routes and locations in order to get the best return, while airports are stuck with high sunk fixed costs in capital assets which cannot easily be redeployed. Market dynamics represent a real risk to airport capital expenditure: hence the enthusiasm of airport operators to enter into long-term contracts with airlines, some extending for up to 20 years.

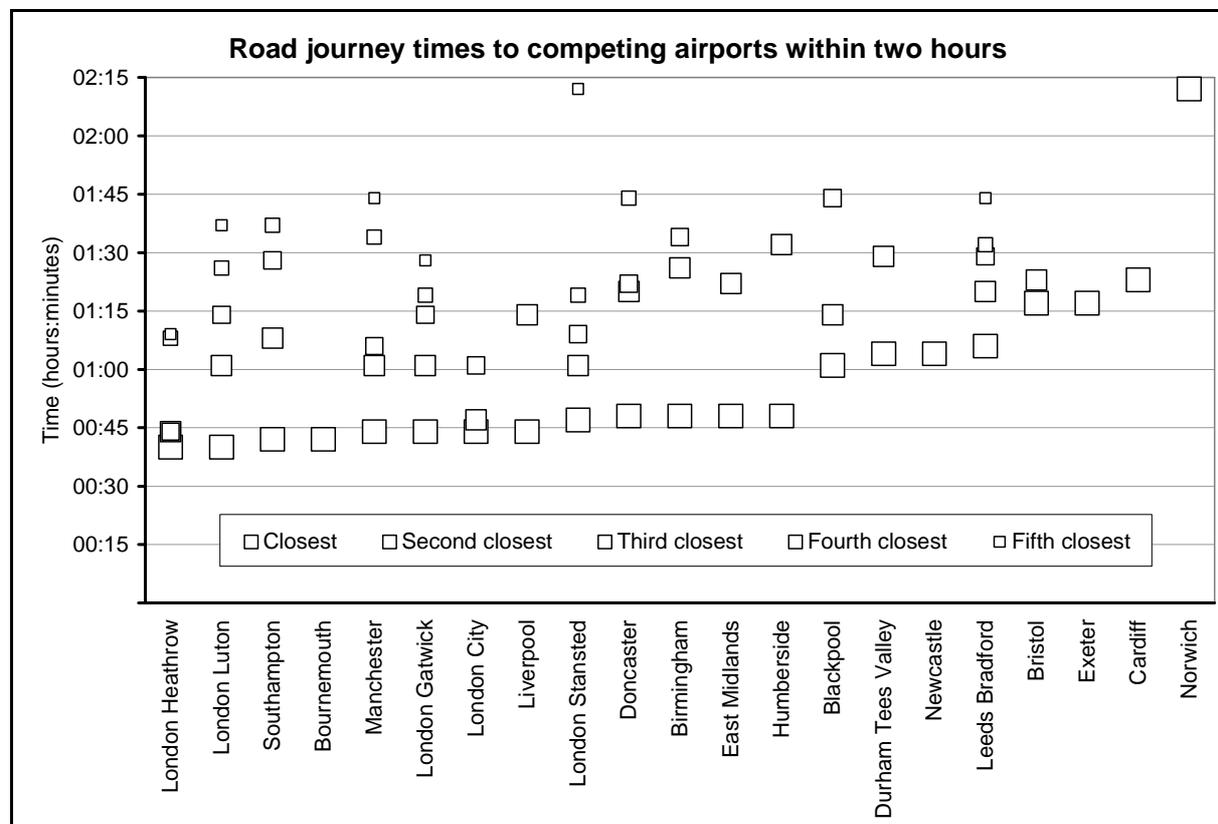
Such contracts place obligations on airports in respect of (heavily discounted) handling charges, quality of service and future investment in additional facilities. In return airlines provide guarantees of traffic volumes and numbers of aircraft based at the particular airport (usually on an escalating basis). While the traditional approach was for airports to levy separate charges for landing fees, aircraft parking, ramp usage

and passenger handling; charges in the new style of contracts tend to be based on passenger throughput.

## AIRPORT COMPETITION

The willingness-to-pay for airport usage by airlines is conditioned by each airport's catchment area. Analysis in the UK by the CAA and the Competition Commission showed that most airports have several competing airports within a 2-hour drive time taken as a proxy for a reasonable catchment area, as shown in Figure 4.

Figure 4: road journey times to competing airports within 2 hours

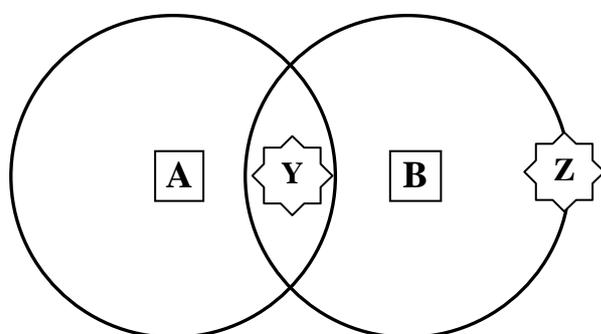


Source data for Figure 4 are attached as Annex B.

Of the 21 airports in the sample, only Norwich has no other airport within 2 hours driving time, many have at least 5 airports within 2 hours and at least one airport within 1 hour. In virtually all cases one airport is within 1½ hours drive of its nearest neighbour. The mean drive time between neighbouring airports is only around 60 minutes. This emphasises the extremely competitive environment within which UK airports operate.

This means that airlines (and thus airports) in the UK cannot price discriminate effectively by the origins and/or destinations of their passengers, as Figure 5 shows.

*Figure 5: competition between airports*



Passengers at “Y” benefit from competition between airports (and airlines) at “A” and “B”. However, passengers coming from point “Z” also benefit from this competition, since neither the airports nor the airlines can discriminate between passengers from “Y” and “Z”.

In general airports are “price takers” in terms of controlling their revenues. However, most remain generally profitable, in contrast to the airline operators. Even small or medium sized airports can make acceptable returns on capital through optimising the scale of their operations.

## **AIRPORT PROFITABILITY**

Excluding exceptionally profitable and unprofitable examples like London City and Blackpool, the average net return on capital for UK airports in 2005/6 was around 11%. This can be compared with returns of around 18%-20% for the non-financial service sector and 8%-9% for manufacturing. Since the overall return for all private non-financial corporations in 2005/6 was around 14%, airports can be viewed as just like any other industry in terms of their financial results.

Nor does airport profitability appear to vary dramatically with airport size. The returns on large airports are within the same range as those for much smaller operations.

A policy implication of this competitive environment and financial performance is that economic regulation, as applied to UK utilities, is rarely needed. Only where regional monopolies exist can a case be made for regulation or restructuring. The concern that BAA dominates the market in the London region and in central Scotland has led the Competition Commission to require BAA to divest itself of Gatwick, Stansted and either Edinburgh or Glasgow. BAA is currently appealing against this decision.

Since 1987 four airports have been subject to price caps: Heathrow, Gatwick, Stansted and Manchester. From April 2009 the price cap on Manchester was removed, and it is debatable whether the caps on Gatwick and Stansted (and possibly even Heathrow) will still be required after the break-up of BAA.

## **CONCLUSIONS**

The airport industry is a multi-product service activity, generally operating on a local basis. It is not a natural monopoly. Experience in the UK has shown that a competitive structure can evolve, and that smaller airports can be profitable and compete effectively with other larger neighbours. Airports in the UK operate in a similar manner to other industries competing in a spatial market, such as large supermarkets, oil refineries and ports. Overall it appears that competition, however imperfect, offers better outcomes for airport customers than regulation: market failure is preferable to the inevitable regulatory failure.

## **DISCUSSION & QUESTIONS**

**David van Rest** (former member of the Midlands TUCC) observed that one aspect of airport regulation had been overlooked in the presentation. He felt that airport operators and regulatory authorities had traditionally taken little action over airlines which regularly failed to comply with rules about landing, take-off and parking practices, thereby causing increased environmental disturbance.

David Starkie was not sure that the facts supported this view. Day-to-day Air Traffic Control and safety considerations had a large impact on how aircraft movements were handled. Airports have, over the years, taken increasing action to regulate and/or mitigate environmental disturbance. London Heathrow has spent very large sums since 1966 on sound insulation for tens of thousands of properties around the airport.

**Peter White** (University of Westminster) noted that while airport profitability appeared to be reasonable good, airline profitability had been very poor (or non-existent) over the years.

David re-iterated that the return on capital for airports was only around average and certainly not exceptional compared to other industries. It was true that airlines had, overall, had low rates of return. IATA members in particular had had very poor and very volatile rates of return. These poor results for airlines were due to a number of factors. A

large element of the industry was subject to government interference and supported by public subsidy (Alitalia, Olympic) or by protection under Chapter 11 bankruptcy proceedings and ownership rules (the US carriers). Overall, free-market capitalism had not been allowed to operate in the airline industry. Any surplus economic rents had, in the main, been captured by airline employees, particularly pilots.

**Stephen Plowden** (Independent Consultant) sought David's views on the future of the air transport industry given potentially escalating fuel prices and increasing environmental concerns.

David accepted that the industry was currently under siege, particularly in the UK. Few people were prepared to acknowledge that the airline industry was a form of public transport. Undoubtedly, in his view, if current public attitudes persisted, these would curtail future growth within the industry. Whilst it was right that the industry should bear its full environmental costs, this was already happening. In the UK the Air Passenger Duty more than compensated for the environmental costs of flying. David noted that, whilst the Green Party in Germany was a much greater political force than in the UK, they were less concerned about environmental damage from aviation. There had been only limited political opposition to the expansion of Frankfurt airport.

**Stephen Bennett** (Transport Scotland) asked whether the nature of airport ownership made any difference to profitability.

David did not think it did. The crucial factor in determining airport efficiency and profitability was the existence of competition between airports. David had a lot of respect for the management of Manchester Airports Group despite this enterprise being 100% publicly owned. Competition from Liverpool, Leeds/Bradford and Birmingham had ensured that MAG operated very efficiently. Potential problems would arise if an operator was allowed to take over an adjacent airport, such as MAG taking control of Liverpool.

**Robert Barrass** felt that there was less competition between airports when it came to long-haul operations. Long-haul departures were concentrated on fewer airports, with feeder flights from many other airports. His impression was that in Germany there was a greater tendency to use surface modes to feed long-haul flights. Was a high speed rail link to Heathrow likely to lead to a similar pattern in the UK? Also, would the pattern of long-haul departures be affected by the trend towards larger aircraft with greater range?

David noted that a surprising number of regional airports had long-haul departures. Manchester and Birmingham were the obvious examples, but Edinburgh, Glasgow, Bristol and Newcastle all had transatlantic flights until the current recession. A high speed rail link could substitute for connecting flights, but at some considerable environmental cost. The energy input and thus CO<sub>2</sub> emissions from building a 200 mile long railway compared to a 2 mile long runway had tended to be overlooked.

**David Metz** (University College London) wished to know whether business for low cost carriers operating from other airports would be boosted by not building a third runway at Heathrow.

David did not see the third Heathrow runway as having very much impact either way on regional airports. The case for the third runway had been made solely in terms of the London region and the demands of its originating and terminating traffic. There were a number of misconceptions about the importance of transfer traffic at Heathrow, often quoted as 30% of all passengers, but building a third runway was economically justified even if all transfer passengers were omitted from the calculations.

**David McEwan** (Visitor) observed that people did not undertake travel for its own sake. Travel always had an objective, such as tourism or business. In his experience, using Heathrow compared very unfavourably to Frankfurt or Charles de Gaulle airports. Was this likely to persuade fewer people to come to London in future, perhaps?

David Starkie expressed some sympathy for BAA. Successive governments had always failed to take difficult decisions about airport development. In 1993 a Commission had determined that Heathrow would need a third runway by 2010 but two years later, in 1995, the then Secretary of State had instructed BAA not to proceed with the proposal. Considerable credit was due to the present government for deciding to go ahead with the third runway at Heathrow: no previous government had been as bold.

**John Cartledge** (London TravelWatch) wanted to know how significant the speaker felt improving means of surface access to airports by public transport was in determining an airport's success.

David was not sure he had sufficient information to answer this question satisfactorily. Private car was the dominant mode of surface access for virtually all airports, although significant numbers of passengers used

taxis and private hire cars. There did not seem to be any evidence that direct rail access gave an airport any significant financial advantage.

**Oliver Bennett** (Visitor) noted that there were no Scottish airports listed in Figure 4 (and Annex B). Given the wide geographic distribution of airports over much of Scotland, was the competitive situation different there?

David commented that competition existed between airports in the central belt of Scotland. Elsewhere the situation was very different. There was no readily available data on the economic performance of individual Highlands and Islands airports. He believed most of these were subsidised. He found it interesting that Inverness airport was heavily subsidised by the Scottish Executive despite having the highest aeronautical charges in the UK and having a similar passenger throughput to Southampton airport, which was profitable.

At this point Dick Dunmore, as Convenor, thanked David Starkie for his excellent presentation and closed the meeting.

Report by Gregory Marchant

## ANNEX A

*Table 1 : Selected financial and operating data for UK airports, 2005-6*

Airport		Turnover (£000)	Movements		
			ATMs	Other	Total
London Heathrow	LHR	1,195,400	472,954	5,981	478,935
London Gatwick	LGW	361,500	254,004	9,058	263,062
Manchester	MAN	290,553	217,396	16,421	233,817
London Stansted	STN	176,500	180,729	15,465	196,194
Birmingham	BHX	111,109	113,668	9,731	123,399
Glasgow	GLA	82,615	97,610	13,296	110,906
Edinburgh	EDI	77,381	117,312	9,808	127,120
London Luton	LTN	77,021	87,690	20,203	107,893
Newcastle	NCL	51,360	55,164	23,798	78,962
East Midlands	EMA	50,566	56,224	24,490	80,714
Bristol	BRS	49,619	59,854	20,670	80,524
London City	LCY	40,180	61,179	9,733	70,912
Aberdeen	ABD	33,954	94,665	17,851	112,516
Belfast International	BFS	31,206	43,780	37,093	80,873
Liverpool	LPL	28,799	43,312	37,347	80,659
Cardiff	CWL	22,103	20,689	22,337	43,026
Southampton	SOU	22,022	45,109	13,351	58,460
Leeds Bradford	LBA	21,023	36,330	31,641	67,971
Exeter	EXT	17,707	14,481	40,572	55,053
Bournemouth	BOH	14,440	14,041	69,600	83,641
Coventry	CVT	14,123	13,951	54,134	68,085
Norwich	NWI	12,089	20,894	30,145	51,039
Humberside	HUY	10,934	11,342	25,996	37,338
Durham Tees Valley	MME	10,834	53,532	52	53,584
London Biggin Hill	BQH	6,892	4,834	62,666	67,500
Blackpool	BLK	6,333	13,028	61,985	75,013
Southend	SEN	4,973	1,548	47,798	49,346

Source: Centre for Regulated Industries, Airport Statistics 2005/6, Appendices D1 and B2.



## Reviews

The views expressed are those of the reviewer and should not be attributed to the Transport Economists' Group

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### **Traffic Jam – Ten years of “sustainable” transport in the UK, edited by Iain Docherty and John Shaw, The Policy Press, 2008 (ISBN: 978-1-84742-072-5)**

Iain Docherty and Jon Shaw have taken as a starting point the 1998 White Paper *A new deal for transport* with “its overt emphasis on sustainability” and sensibly asked what has been achieved in the subsequent decade. In this book they have assembled a series of chapters by various authors, each reviewing developments in one area of transport over the last decade. The title’s inverted commas hint strongly at their collective conclusions.

Our trading economy could not function without our ports, and David Pinder explains not only the changing needs for port capacity but also how EU environmental requirements may be an even bigger impediment to providing it than the domestic planning system. The planning system does not, however, appear to address the associated traffic from producers and to consumers, for much of which there is little option but transport by road.

Graham Parkhurst and Geoff Dudley examine roads and their traffic and document the big shift from “predict and provide” to “making best use”. They note, as others have done, that road pricing, even when renamed congestion charging, remains politically unpalatable almost everywhere outside London. The “elephant in the room”, they conclude, may well be the global oil price ... which is now only one-third what it was as they wrote.

Oil prices are also critical to air transport, examined by Brian Graham. “Sustainable” policy is supposedly national, although it was EU, rather than domestic, deregulation that let loose the low-cost carriers which now dominate short haul travel. The resulting growth at regional airports is daunting, with several doubling passenger traffic between 2001 and 2006. Nonetheless, half of all passengers use BAA’s three London airports, and half of them use Heathrow, which is now operating at 98% capacity.

Whatever London airport capacity is appropriate and “sustainable”, funding it requires a chain of faith – finance markets believe that airports believe that airlines believe that passengers will be found to pay for it – which may only work at Heathrow. Even where the chain holds, investors must deal with planning processes and protest politics. Can the UK still exercise an aviation policy independent of the EU or even, with BAA broken up, an airport policy independent of the finance markets, planning and protests?

Bus and light rail, covered by Richard Knowles and Pedro Abrantes, are also areas of disappointment. Authorities outside London are expected to “plan” for bus services over which they have no effective control and which the operators have no desire to see re-regulated or subject to competitive tender. Despite hopes in 2000 for 25 new light rail schemes by 2010 within 5 years London will, on current trends, have more bus and light rail journeys than the rest of Britain put together. Will the latest hope, bus rapid transit, make much difference?

John Preston reviews progress on the railways, where the original vision, presumably influenced by the then recently deregulated bus industry, was that dynamic and commercial “open access” operators would limit the need for subsidy to a declining rump of socially necessary services. In the event, only rail freight has been effectively deregulated, and he lists the bodies now apparently needed to plan, specify, fund, regulate and monitor infrastructure and passenger services. On what this is all costing, he notes, “It is very difficult to put together consistent time-series data on funding because these are affected by alterations in definitions and jurisdictional changes”. In other words, he can’t tell whether privatisation has saved billions or cost billions.

Danny MacKinnon and Geoff Vigar review how transport policy has diverged, or not, within the devolved nations and regions after the removal of at least some central controls. Peter White shows how London may be the exception which (sadly) proves the rule: a congestion charge implemented, rising bus provision and “soaring” use, a resurgence in cycling and light rail and major heavy rail schemes in hand. The main sour note is the three London Underground Public-Private Partnerships imposed on the first mayor, two of which had unravelled even before their first scheduled review by the Arbiter.

Tom Rye contrasts our local difficulties with progress on the continent, admitting that his analysis cannot be wholly systematic. Nonetheless he repeatedly reports a consensus that government should provide sufficient funding for extensive and, by UK standards, cheap public

transport, and then leave the cities and regions to get on with providing it. He contrasts this with the Transport Innovation Fund (TIF), in which central government offers money to local authorities to implement (or impose) its unpopular policies, only to find that them rejected locally, leaving funds unspent and a policy vacuum.

Reviewed by Dick Dunmore



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The Transport Economists' Group, formed in 1973, provides a forum for people involved in transport economics to meet regularly and discuss matters of mutual interest. Membership is open to economists working in transport and others whose work is connected with transport economics.

The aim of the Group is to improve the quality of transport management, planning and decision making by promoting lectures, discussions and publications related to the economics of transport and of the environment within which the industry functions.

Meetings are held every month from September to June (except December) at Arup's Central London HQ at 13 Fitzroy Street. The meetings consist of short papers presented by speakers, drawn from both within the Group's membership and elsewhere, followed by discussion.

The Group's Journal, "The Transport Economist", is published three times a year reporting on meetings and other activities of the Group. It reviews recent publications of interest and contains papers or short articles from members. The Editor welcomes contributions for inclusion in the journal, and can be contacted at [peter.gordon@deltarail.com](mailto:peter.gordon@deltarail.com)

The current membership of over 150 covers a wide range of transport modes and types of organisation. Members are drawn from transport operators, consultants, universities, local and central government and manufacturing industry. All members are provided with a full membership list, updated annually, which serves as a useful source of contacts within the profession. Applications from people in all sectors are welcome.

Applications for membership should be made on a form obtainable from the Membership Secretary at [gregorymarchant.teg@btinternet.com](mailto:gregorymarchant.teg@btinternet.com).

Alternatively, an application form can be downloaded from the Group's website: [www.transecongroup.org](http://www.transecongroup.org).

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Details of meetings are provided on our website at

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