

Regulating by contract and licence: the relationship between regulatory form and its effectiveness

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Introduction

I currently hold two public offices, as Chairman of the Office of Rail Regulation and as the Arbiter for the London Underground Public-Private Partnership (PPP) Agreements. Both roles are created by statute and, although I am appointed by the Secretary of State for Transport, I carry out the statutory functions independently of Ministers.

In this lecture, I aim to compare and contrast the two roles and the sectors within which I operate. The PPP will be less familiar to most of you, and I set out a fairly full description of it. I then compare the operating structure with that which applies in the heavy rail sector. Following that, I review the role of the Arbiter, and set out some similarities and differences with a traditional economic regulator. I then considers how the different models assess and promote efficiency, and in particular the differences between a contractual and a licence framework. I finish with some tentative conclusions.

A brief review of the London Underground PPP

London Underground is the oldest and one of the biggest metros in the world: over three million journeys are made every day (over a billion in a year), with the daily record being 3.8 million journeys (recorded last December). Assets include 276 stations with 400 escalators, about 600 trains, 800 km of track (the majority above ground), and 13 major depots.

The PPP Agreements are 30 year contracts between London Underground and three 'Infracos' to maintain, renew and enhance the network. Infracos are responsible for all engineering assets, including track, signalling, stations and depots, and also rolling stock. London Underground operates all trains and stations, and collects the revenue.

Two contracts were awarded to the Metronet consortium (Bombardier, Balfour Beatty, Atkins, Thames Water, EdF), and one to Tube Lines (Bechtel, Amey/Ferrovial – the latter buying out the one-third shareholding originally held by Jarvis). The two Metronet contracts cover the Bakerloo, Central and Victoria Lines (BCV) – which also includes the Waterloo and City Line, and the Sub-Surface Lines (SSL) – Circle, District, Hammersmith and City and Metropolitan Lines. Tube Lines are responsible for the Jubilee, Northern and Piccadilly Lines (JNP).

The Tube Lines contract commenced on 31 December 2002 and the Metronet contracts on 4 April 2003.

Under the PPP Agreements, the Infracos are required to demonstrate good practice in applying the principles of whole-life asset management¹. Some specific deliverables are specified in the contracts, principally in relation to line upgrades and station refurbishments/modernisation. Performance is incentivised through three main ‘outputs’ (capability, availability, ambience), which I describe in more detail below, with performance regimes which adjust the monthly Infrastructure Service Charge (ISC) payment from London Underground to the Infracos.

Outputs and prices reviewed every 7½ years at a Periodic Review. There is also the possibility of an ‘Extraordinary Review’ if costs are higher than in the Infraco’s bid. In essence, the ISC is increased to meet the efficient and economic level of costs subject to a materiality threshold which is at the Infraco’s risk².

The line upgrades deliver increased capacity and reduced journey times through a combination of new rolling stock and new signalling systems. Already, for example, a seventh car has been added to Jubilee Line trains, increasing capacity by about 18%. The other significant improvement has been on the Waterloo and City Line, with small scale improvements on the Central and Victoria Lines. Major upgrades are under way on the Jubilee and Northern Lines, involving transmission based signalling, and to provide new rolling stock and signalling on the Sub-Surface and Victoria Lines.

The contractual provisions for increases in capability are summarised in Figure 1 below.

Figure 1
Line upgrades specified in PPP Agreements

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Contract Delivery Date	Journey Time Improvement	Capacity Increase
Central																		Mar-06	5%	29%
Victoria																		Mar-06	5%	
Waterloo & City																		Mar-07	12%	30%
Jubilee																		Dec-09	22%	18%
Northern																		Jan-12	18%	21%
Northern SSL																		Mar-12	2%	
Southern SSL																		Mar-12	1%	
Victoria																		Aug-13	18%	35%
Piccadilly																		Oct-14	19%	35%
Northern SSL																		Feb-15	11%	19%
Southern SSL																		Feb-15	2%	
Southern SSL																		Mar-18	13%	19%
Bakerloo																		Mar-20	18%	23%

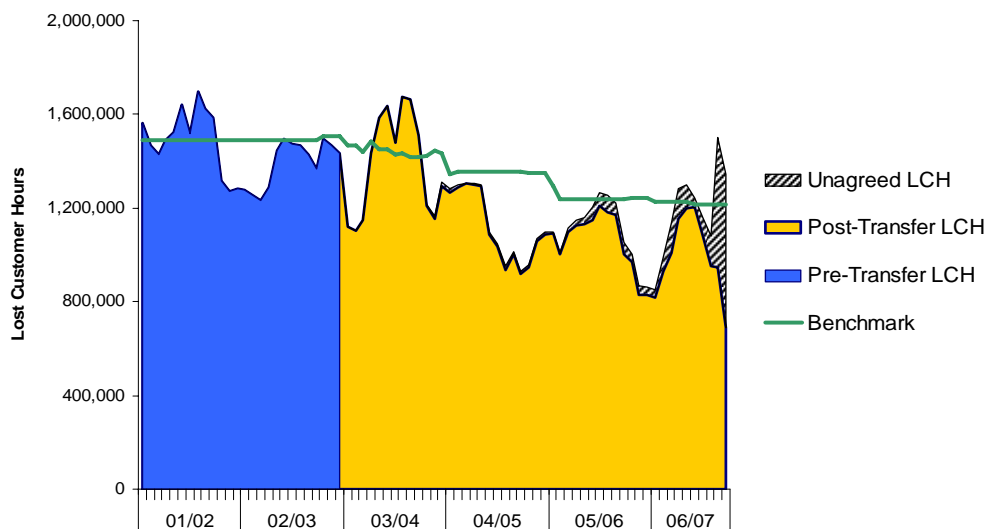
¹ “Infraco shall adopt and demonstrate an efficient and economic whole-life cost approach to decisions regarding the balance between maintenance, renewal and enhancement of Assets, regardless of when in the Contract Period such decisions fall to be made which approach shall be established by reference to Good Industry Practice” (PPP Agreement, Schedule 3).

² The Materiality Threshold is £50 million for each Infraco in each 7½ year period, except that it is £200 million for Tube Lines in the first Review Period.

The stations programme involves the refurbishment or modernisation of most stations during the first Reference Period – 53 for BCV, 97 for JNP and 75 for SSL. This programme is well underway, although Metronet is significantly behind the contractual delivery programme.

Under the PPP Agreements, there is no target level of performance for the availability metric (which measures how well the system operates on a day to day basis in terms of Lost Customer Hours – reflecting the different number of passengers affected by delays on different parts of the network and at different times of day). Instead, there is an obligation on Infracos to operate in accordance with whole-life asset management principles, with a performance regime to incentivise improvements in performance. The performance regime contains a benchmark and also an ‘unacceptable’ level beyond which London Underground can take further contractual action for persistent poor performance. Although there have been some notable period of poor performance, the overall trend since transfer has been improving, and has overall been better than benchmark for most of the period, as shown in Figure 2 below.

Figure 2
Availability measure of performance 2001 – 2007 (all Infracos)



Precedents for the LUL PPP

The Private Finance Initiative (PFI) provides the most obvious precedent for the PPP – and indeed London Underground itself had previously entered into a number of PFI agreements (covering such things as maintenance and enhancement of the power network, communications and new trains for the Northern Line). The fixed period of the contract and the ‘project financing’ basis of its funding both have clear precedents in PFI structures – although it is worth noting that the financing of ‘traditional’ price regulated utilities such as water

companies and energy networks appears to be converging to the same financing structure.

But at the same time, the PPP is not a conventional PFI project. Some important differences include the following:

- the PPP is not a conventional Design, Build, Finance and Operate (DBFO) contract, with clearly separated 'build' and 'operating' phases (with the build often on a new site) – instead, the Infracos inherit an existing network, with maintenance and renewals comprising the majority of the expenditure from the start;
- in part reflecting this, the contracts contain extensive performance arrangements, rather than a simple output specification; and
- the PPP is not a 30 year 'fixed price' contract – there are provisions for Periodic Reviews every 7½ years both to adjust payments in line with those that could be achieved by a 'Notional Infraco' with carries out its activities in an "overall efficient and economic manner and in accordance with Good Industry Practice", and to give London Underground a contractual right to restate its requirements both to reflect changes in demand patterns and affordability.

The adjustments in the PPP Agreements to reflect these factors, compared with a 'standard' PFI model, draw heavily on experience with the regulated network industries in particular in respect of the provisions for Periodic Review and for Extraordinary Reviews³.

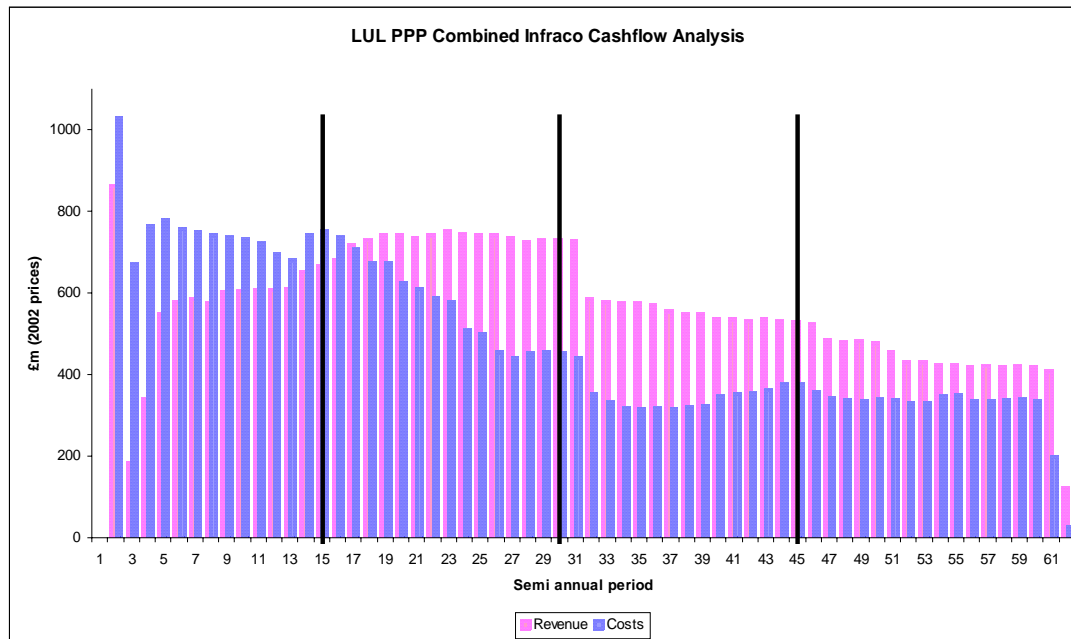
Although the aim was for monitoring and enforcement of delivery to be achieved through contractual means – as indeed is the case with the franchise agreements between the public sector and train operating companies in the heavy rail sector – it was recognised that there would need to be an independent body to deal with disputes around pricing at reviews. So the role of the Arbiter was created – a role which was to be created by statute, to give it the independence of a regulator, but which was also constrained by the provisions of the contract itself.

This independent role was seen as crucial in providing assurance to the funders of the Infracos that the existence of the Periodic Review provisions would not be used by London Underground to undermine their expected returns – and equally to provide reassurance to London Underground that Infracos would not have monopoly power in repricing the contracts at reviews.

The importance of assurance to funders reflects the extent of the borrowing required by the Infracos, particularly in the first period, to fund an expenditure programme which is front-loaded. This is shown in Figure 3.

³ Indeed there was a proposal at one stage that ORR should be the regulatory body overseeing the Periodic Reviews.

Figure 3
Infraco costs and revenues 2003 – 2033 (at 2002 prices)



A brief review of the heavy rail sector

Having outlined the structure of the London Underground PPP, I turn now to the heavy rail sector. This is much more familiar, and has many features shared with other network industries such as in energy.

The heavy rail sector is vertically separated between infrastructure and train operation. This reflects the required division of responsibilities set out in EU directives (although those directives do not of themselves require ownership to be distinct).

Network Rail, a Company Limited by Guarantee established following the administration of Railtrack plc, is subject to a licence which is monitored and enforced by the Office of Rail Regulation (ORR). ORR sets overall regulatory targets (such as for delay minutes caused by Network Rail) and an overall level of revenue which is judged appropriate to achieve those outputs in an efficient way. ORR's role in this respect is very similar to that of Ofgem in respect of electricity and gas transmission/distribution companies.

But, as I shall describe in more detail later, it would be wrong to characterise the heavy rail sector as one where regulation operates wholly through licences rather than contracts (even though train operators equally require a licence from ORR before they can operate)⁴. For example, ORR is also required to approve all

⁴ I do not discuss in this lecture ORR's role in respect of safety regulation. Since 1 April 2006, it has been responsible for safety regulation policy in respect of railways and, through HM Rail Inspectorate, for enforcement of the Health and Safety at Work Act in respect of railways.

access contracts between Network Rail and train operators (including the multi-lateral contractual provisions contained in the Railway Network Code). In addition, as mentioned previously, the ‘regulation’ of services to passengers is (apart from open access services) mainly achieved through contracts. Matters covered in licences are, in the main, requirements to participate in network-wide arrangements rather than relating to the level of service provided.

In general, suppliers to Network Rail and train operators are only subject to general competition law. This is the case, for example, with the rolling stock leasing companies (ROSCOs), whose activities are currently the subject of a market review by ORR.

So although both underground and heavy rail are vertically separated, the boundaries are set in very different places. For example, London Underground (a public sector body, which is a subsidiary of a local authority body – Transport for London (TfL)) is responsible for both train and station operations and for signalling. Infracos are responsible for rolling stock maintenance and replacement, unlike Network Rail, thereby helping to deal with concerns in the heavy rail sector about management of the wheel/rail interface.

Overall, therefore, the allocation of responsibilities is very much simpler for the underground. This is summarised in Figure 4.

Figure 4
A comparison of structures in the underground and heavy rail sectors

Prime responsibility for:	National rail	Underground
Strategy and service specification	Department for Transport (DfT)	London Underground
Network ownership	Network Rail	London Underground
Network operations (signalling etc)	Network Rail	London Underground
Train operations	Train Operating Companies (TOCs)	London Underground
Station operations	TOCs, Network Rail (major stations)	London Underground
Network maintenance and renewal	Network Rail	Infracos
Network enhancement	Network Rail, Special Purpose Vehicles (SPVs)	Infracos, London Underground
Rolling stock ownership	DfT, TfL, TOCs, ROSCOs	Infracos

Functions and duties of the Arbiter

I turn now to the role of the Arbiter, to which I was appointed on 31 December 2002 for a term which has since been extended to cover the first Periodic Review in 2010.

The PPP Arbiter is an individual – there are so far as I know no plans to replace me with a Board! The Arbiter is appointed by the Secretary of State for Transport, but on terms which guarantee his independence in very much the same way as for economic regulators. So as a creature of statute, the Arbiter is much more than an arbitrator. But at the same time the role looks very different from that of a traditional economic regulator.

Under the terms of the Greater London Authority (GLA) Act 1999, the Arbiter can:

- give directions on matters specified in the PPP Agreements when asked by one or both parties (GLA Act 1999 section 229); and
- give guidance on any matter relating to a PPP Agreement when asked by one or both parties (section 230).

The Arbiter also has “further powers” for the “proper discharge of functions” (section 232), which allow him to:

- carry out inspections;
- consult in relation to directions or guidance;
- “do all such things as he considers appropriate” for giving guidance or direction, even if a reference for guidance or direction has not been made; and – a wonderfully broad catch-all
- “do all such other things as he considers necessary or expedient”.

In addition, the Arbiter has statutory powers to require the provision of information by both the PPP Parties, their associates and their subcontractors (section 233).

The Act establishes an overall statutory duty for the Arbiter in the following terms (section 231):

- The Arbiter “shall act in the manner best calculated” to achieve four objectives:
 - giving LUL the opportunity to restate its requirements on affordability grounds;
 - promoting efficiency and economy in the provision, construction renewal, improvement and maintenance of the Underground;
 - ensuring that the Infracos, if economic and efficient, earn the equity return specified in the PPP Agreement; and
 - enabling the Infracos to “plan the future performance of the PPP Agreements with reasonable certainty”.

The second and fourth of these objectives are similar to ones which appear in the duties of economic regulators operating in a traditional licence environment. Even the first now has its parallels in the process written into the Railways Act 2005 to require the Secretary of State and Scottish Ministers to set out for ORR, as part of its Periodic Review of Network Rail funding and outputs, the high level specification of the outputs that it wishes the railways to provide (the HLOS) and the statement of public funds available for that purpose (the SoFA). But the third is a very different formulation of a financing duty from that which any economic regulator has, and clearly derives from the structure and financing of the PPP Agreements.

There are other features which reflect the contractual basis of the PPP: for example, the Arbiter is only able to give guidance or direction when requested by one of both the parties to an agreement, and can only give directions on matters specified in the Agreements. In addition, that Arbiter is required to “take into account”, in giving guidance or direction, factors which are notified by the PPP parties as “factors to which he must have regard”. So I now turn to these contractual provisions.

Contractual provisions affecting the PPP Arbiter

As explained above, the functions and duties of the Arbiter derive from statute, but are in part defined by the contract. For example, the Arbiter can only be asked for directions on matters specified in the PPP Agreements. These include, for example:

- the process for Periodic and Extraordinary Reviews;
- financing issues, including whether there has been a material change in risk, whether there is “financing impossibility” and the appropriate equity rate of return where additional equity is subscribed;
- Infrastructure Service Charge (ISC) requirements at Periodic or Extraordinary Reviews;
- “Prior Net Adverse Effects” – essentially whether there are changes in requirements or costs which need to be ‘logged up’ from the previous review period; and
- the exercise of Special Share Rights.

While the Parties can also seek guidance on “any matter relating to a PPP Agreement”, the Metronet contracts contain specific reference to a request to the Arbiter for annual guidance on performance of the Infracos to date. This provision was intended to give Metronet and its funders early notice of any perceived inefficiencies, to allow time for remedial action before a Periodic Review. The first such annual report was published in November 2006⁵.

⁵ Although the contract envisaged the first report being prepared in 2005, in respect of performance to 31 March 2005, Metronet agreed with London Underground not to seek a report in that year, and agreed a waiver to that effect with its funders.

Reflecting the provisions of sections 233 of the Act, the contract explicitly provides that the Parties can express the terms of a reference to the Arbiter “so as to advise him that they do not request or require him to consider any aspect of the matter being referred on which they state they have reached agreement”. Taken together with the reactive nature of the Arbiter’s powers, this would appear to give the Parties full control of the terms of reference of the Arbiter. Indeed, the Act allows the Parties to set aside directions by the Arbiter – which would otherwise have the effect of modifying the contract – if they agree to do so.

However, there are other provisions which perhaps provide some counter-weight to this. For example, when giving guidance, the Arbiter can give “such guidance as he considers appropriate” and can give directions on “any other matter which is ancillary or incidental to the matter referred” (section 229 (3)(b)). And it is of course unlikely that directions in the context of a Review would be set aside because any variation would have a commercial impact on one or other of the Parties. So, in the absence of appeal to the Competition Commission (CC) as in the case of most price-regulated utility networks, Judicial Review is the only remaining basis of challenge⁶.

This makes it all the more important that the Arbiter can demonstrate compliance with the statutory duty placed on him in the Act, and in particular how he has balanced different objectives within the overall duty in reaching his decisions. This is one reason why I have established a Procedural Framework for the handling of references.

It is worth stressing one particular issue here. Where the Parties give joint guidance to the Arbiter as a matter to which he must have regard, referring to the relevant section of the Act, he is required to take account of those factors. But this does not mean that he is bound to follow the guidance; complying with the statutory duty requires a balance to be struck, and it is clearly possible that I might conclude that my overall duty is best achieved by adopting an approach different from that agreed by the Parties.

Comparing the Arbiter with an economic regulator

In comparing the Arbiter with an economic regulator, some of the most obvious differences are what the Arbiter does **not** do. For example:

- the Arbiter does not monitor or enforce service delivery: this is for London Underground;
- he does not determine the outputs to be delivered by the Infracos (except where this is disputed at the time of a Review): this is for London Underground, subject to affordability constraints⁷;

⁶ This is one feature which makes the role of the Arbiter is arguably more like that of the Competition Commission than of an economic regulator.

⁷ Although, as discussed below, this arrangement has now been mirrored in the Railways Act 2005 in respect of public funding of the mainline railway.

- he does not develop or enforce safety policy: this is a responsibility of London Underground, overseen by Her Majesty’s Railway Inspectorate (HMRI) (now part of ORR); and
- he has no role in resolve routine contractual disputes: these matters are covered by dispute resolution procedures in the PPP Agreements, which can be escalated to adjudication and ultimately the courts.

The table below sets out a more detailed comparison of the roles:

Regulator	Arbiter
Active role, with broad public interest duties	Involved only when requested by parties
Modifies licence and enforces licence conditions	No general power to modify contract
Monitors overall performance in meeting objectives	No role in monitoring or enforcing performance
Sets revised price limits at Reviews	Gives directions on elements of, or total, ISC when requested
Determines framework for Periodic Reviews	Contractual framework sets issues considered at Review
Competition Commission as appeal body	Only appeal is through Judicial Review
Concurrent jurisdiction with OFT under Competition Act	Rail Regulator has competition powers in respect of Underground rail services

But even here, the differences between regulators themselves are significant, and in some respects perhaps as significant as the differences between the Arbiter and a ‘typical’ regulator. For example:

- water price reviews are not a licence modification as is the case with energy price reviews;
- the ability to review rail access charges depends on the terms written into bilateral access contracts;
- in the case of airports, there is a mandatory reference to the CC, rather than an appeal to the CC;
- the importance of multilateral contractual provisions in a Network Code varies in different sectors – as do the governance and appeal mechanisms⁸;

⁸ For example, as in the case of auctions for capacity on the gas transmission system, it is sometimes difficult to understand the rationale for which issues appear in the Network Code and which in the licence.

- not all regulators have competition powers; and
- statutory duties differ widely – the attempt to standardise them in what became the Utilities Act 2000 having failed.

So again, it is too simplistic to characterise the two regimes as simply ‘regulation through licence’ and ‘regulation through contract’. Much more depends on the approach to incentivising delivery of outputs and improvement of efficiency, and I now turn to these issues.

Assessment of efficiency

As explained earlier, the PPP Parties can give joint guidance to the Arbiter. The guidance incorporated in the PPP Agreements cover the following matters:

- the nature of the process for a Periodic or Extraordinary Review;
- certain financial issues relating to a Periodic Review;
- the specification of the Notional Infraco, which carries out its activities in an “overall efficient and economic manner and in accordance with Good Industry Practice”, with additional guidance on factors relevant to the assessment of efficient and economic performance and Good Industry Practice;
- the specification of a Net Adverse Effect (that is, cost or revenue changes that would have been experienced by a Notional Infraco, and which may therefore be recoverable through an Extraordinary Review);
- the treatment of refinancing benefits; and
- the behaviour expected of the PPP Parties operating within a spirit of partnership.

The Arbiter has to take account of this guidance: but this does not mean he must follow it. It does, in my view, establish a requirement for the Arbiter to pay particular attention to it, and a presumption that he should follow it where the guidance is not in conflict with other parts of the Arbiter’s statutory duty. Where there is a conflict, and he proposes to depart from the guidance, the Arbiter should explain why his approach is the one which he considers is “best calculated” to achieve his overall statutory duty – and give the Parties appropriate opportunity to make representations.

One part of the guidance which I have followed closely in references to date (and in developing the Office’s work programme) is in respect of assessing the costs and revenues of the Notional Infraco. This is defined in the PPP Agreements as “an assumed entity ... that carries out its activities in an overall efficient and economic manner and in accordance with Good Industry Practice, that has specified characteristics including the same contractual commitments as Infraco and also has Infraco’s responsibilities for future performance of the Contract ...”. The specified characteristics include, in particular, ones relating to asset

management planning, supply chain arrangements and the use of competitive tendering⁹.

The contract does not define “efficient and economic”. While it does define Good Industry Practice¹⁰, more useful perhaps is the list of characteristics of Good Industry Practice contained in the guidance. I have set out the approach I propose to adopt to applying the “overall efficient and economic” and “Good Industry Practice” tests in my first annual report on the two Metronet Infracos¹¹.

One particularly important issue in judging the performance of the Infracos is the assumption that is made about the supply chain. Metronet put in place at transfer a tied supply chain arrangement with its shareholders for most of the project work to be undertaken in the first Reference Period (and beyond in the case of the line upgrades), whereas Tube Lines has generally awarded contracts for such work through competitive tender (but has made more use of secondments of staff from its shareholders). There is a particular emphasis in the guidance to the Arbiter on the possibility that the Notional Infraco might adopt a range of procurement approaches, and that the Parties agree that initial supply chain and secondment arrangements should not be considered by the Arbiter as uneconomic or inefficient if an Infraco is delivering the required outputs and is not seeking an increased ISC.

In addition, the Arbiter is guided to presume that the “pricing and terms of [a] contract [procured through competitive tendering] were a fair reflection of the market for such a contract at the date when the contract was entered into (although this shall not constitute a presumption that the procurement strategy of Infraco under which such contract was entered into was efficient and economic)”.

Taken together, these provisions perhaps imply a greater reliance on the outcome of competitive tendering processes in establishing efficient costs than has been the practice of economic regulators. But in other respects, the approach is broadly similar – if worded differently. For example, the Notional Infraco definitions and guidance make it clear that the Notional Infraco should not be assumed to be on the efficiency frontier, that the Arbiter should make use of benchmarking between the Infracos and with other external comparators in “markets relevant to the Infraco’s activities”, and that account should be taken of costs trends in relevant benchmark companies and industries.

⁹ Relevant extracts from the definitions and guidance are at Annex 1. For further discussion of how the definitions and guidance might be applied in a Review, see for example the most recent guidance published by the Arbiter: “Treatment of Investment at an Extraordinary Review: Final Guidance”, 13 March 2007, at http://www.ppparbiter.org.uk/files/uploads/n_guidance/200731217517_Final%20Guidance%20on%20Treatment%20of%20Investment%20at%20an%20ER.pdf.

¹⁰ “Good Industry Practice means ... the exercise of the degree of skill, diligence, prudence and foresight and practice which could reasonably and ordinarily be expected from a skilled and experienced person ... “

¹¹ “Annual Metronet Report 2006”, 16 November 2006, at http://www.ppparbiter.org.uk/files/uploads/n_guidance/2006112012398_aMR%202006%20final%20guidance.PDF.

So the approach to assessing efficiency under the PPP can legitimately draw on the experience of the economic regulators in establishing a view of efficiency and the speed of both frontier shift and catch-up. It can also include more directly relevant comparisons with the performance of Network Rail undertaken by ORR.

At first sight, the same conclusion might not be drawn in respect to the assessment of efficient financing costs. The PPP Agreements have some particular features, for example to protect the costs of financing the borrowing in place at transfer and to protect the equity returns expected by the shareholders (assuming that the Infraco continues to operate in an efficient and economic manner). Only where there new funding is required does the Arbiter appear to have any input¹². This looks very different from the approach adopted by economic regulators of establishing a Regulatory Asset Base and applying a weighted average cost of capital (WACC).

However, recent changes in the financing structure of price-regulated utilities could bring a significant degree of convergence between the issues facing the Arbiter and an economic regulator. In the relatively benign funding climate that has been experienced over the past few years, increased gearing and changes in the relative power of shareholders and lenders has perhaps not created any significant issues for economic regulators, although the consultations they undertake on changes of control indicate potential concerns¹³. But if capital market conditions become tighter, and companies are experiencing cost overruns, the ability of economic regulators to adopt approaches developed in the context of greater shareholder funding might be constrained. It may then be necessary for economic regulators to look at the components of financing to a greater extent than at present, and to be more explicit about the risks facing utility companies, how they are to be handled and the implications for shareholder and lender returns.

So even in respect of financing issues, the questions facing economic regulators and the Arbiter may be increasingly similar – even without taking account of the involvement of two price-regulated utilities (Thames and EdF) as shareholders in Metronet.

¹² The PPP Agreements envisage possible references to the Arbiter on: whether there is a need for additional funding at a Periodic Review; whether the proposed revisions to the contract at a Periodic Review constitute a “material change in risk”, or whether they have created “financing impossibility”; and the appropriate cost of additional debt financing and the appropriate return on additional equity.

¹³ See for example: “Possible offer for BAA plc: statement by the UK Civil Aviation Authority”, 24 February 2006, at http://www.caa.co.uk/docs/5/ergdocs/caastatement_feb06.pdf, and “The completed acquisition of Thames Water Holdings Plc by Kemble Water Limited: A consultation paper by Ofwat”, February 2007, at [http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/AttachmentsByTitle/tms_conspaper050207.pdf/\\$FILE/tms_conspaper050207.pdf](http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/AttachmentsByTitle/tms_conspaper050207.pdf/$FILE/tms_conspaper050207.pdf)

The following table summarises the similarities and difference in the analytical approach to assessing efficiency – both in terms of operations and financing – under the PPP Agreements and in an economic regulatory context.

Economic regulation	PPP
<p>'Efficient & economic'</p> <ul style="list-style-type: none"> • Adjustments to base year • Capex and opex efficiency targets – approach to frontier • Use of comparators/benchmarks 	<ul style="list-style-type: none"> • Costs incurred by notional 'good (ie not 'best') practice' Infraco • Use of contract prices • Scope for benchmarking?
<p>WACC</p> <ul style="list-style-type: none"> • Single WACC used in assessing allowed revenue • Optimal not actual gearing? • Embedded debt cost not generally allowed 	<ul style="list-style-type: none"> • Separate consideration of new/old debt/equity • Market testing for new debt • Arbiter may be asked to determine return on new equity
<p>RAB</p> <ul style="list-style-type: none"> • Based on initial flotation value • Logging up between reviews 	<ul style="list-style-type: none"> • No RAB, but considers financing of 'logged up' costs at Periodic Review

Promoting efficiency: licence v contract

I turn finally to the central question posed in the title of this lecture: whether the licence powers available to economic regulators provide a more effective basis of promoting effectiveness and efficiency – in terms both of delivery of required outputs and cost efficiency – than the PPP contractual structure.

Network Rail operates within the framework of a licence monitored, enforced and (subject to appeal to the CC) modified by ORR. A key licence provision is in Condition 7, whose purpose is “to secure—

- (a) the operation and maintenance of the network;
- (b) the renewal and replacement of the network; and
- (c) the improvement, enhancement and development of the network,

in each case in accordance with best practice and in a timely, efficient and economical manner so as to satisfy the reasonable requirements of persons providing services relating to railways and funders in respect of:

- (i) the quality and capability of the network; and

(ii) the facilitation of railway service performance in respect of services for the carriage of passengers and goods by railway operating on the network.”

Under the terms of this condition, Network Rail is required to publish a business plan and to report against it. Key regulatory targets (eg for delays caused by Network Rail) are also established and enforced through this condition.

In addition, the bilateral access agreements contain some provisions about performance at TOC level (eg the Joint Performance Improvement Plans) which can be enforced by TOCs under industry arrangements, with appeal to ORR.

By contrast, monitoring and enforcement of TOC obligations, including provisions in respect of fares and ticket retailing, is based on provisions in the franchise agreements and is undertaken by DfT. This is essentially similar to London Underground’s role under the PPP Agreements, although the franchise agreements lack many of the features of the PPP Agreements and, despite a suggestion to this effect in the 1994 Rail Review White Paper, there is no ‘franchise arbiter’ role to resolve disputes between DfT and TOCs.

In comparing the operation of contractual regimes with the licence regime which applies to Network Rail and other network utilities, a number of differences would seem relevant. Particular differences are the impact of contract length, particularly where the period of the contract is fixed and there is no presumption of extension, the risk of confusion between contractual and ‘regulatory’ remedies where both are available, and the basis of modification. I will discuss these in turn.

The principle of a long-term contract such as the PPP is that it enables private sector companies to plan and finance their activities on a whole-life basis, and thereby deliver better value for money than if shorter term considerations acted as a constraint. Thirty years was seen as long enough to ensure this, particularly when reinforced by contractual provisions in respect of asset management. But the downside of long-term contracts is that they may not deal effectively with changes in circumstances: for example, all the original long term franchise agreements, some of which were let for fifteen years to underpin investment in rolling stock, but without any review provisions, have either been terminated or renegotiated. The risks are not all one way: there has been considerable criticism of the initial rounds of PFI contracts from the National Audit Office because of inadequate provision to claw back a share of the benefits to the private sector of refinancing following completion of construction.

Equally, however, there is a concern that the Periodic Review provisions under traditional economic regulation may create a short-term perspective – effectively a series of five-year contracts rather than one of indefinite life. To some extent this effect has been mitigated by mechanisms to phase the transfer to consumers of the benefits of increased efficiency rather than remove all the benefits at the point of the Periodic Review. But uncertainty about the longer term regulatory framework clearly creates a degree of uncertainty, which may be problematic for companies with highly leveraged financing structures.

The response to these issues in the PPP structure is to recognise that both the view of efficient costs and requirements need to evolve, and to introduce a Periodic Review every 7½ years. (This duration reflected a view that the five years adopted by economic regulators was unnecessarily short in the context of the work covered by the PPP Agreements.) Arguably, this creates the same risk of short-term decisions as described above, but it is hard to see how this framework can be less effective in terms of incentives than a five-yearly review under a licence framework.

However, another feature of the licence regime clearly operates in a way which offsets this concern, namely the indefinite nature of the licence¹⁴. Although the time remaining under the PPP Agreements at the first review, 22½ years, is arguably still long enough for efficient decisions and financing, by the time of the second review this is unlikely to be the case. So either at that stage the contract will be renegotiated and extended or a new contract will be put in place. Without that, there will at the very least be perverse incentives on the Infracos in assessing whole-life costs, and at worst a run-down of the assets which London Underground will be unable to prevent effectively.

A second issue is the risk of confusion between contractual and 'regulatory' remedies. To take two examples: the 'network change' provisions in rail access agreements provide a mechanism – which was exercised by GNER following Hatfield – for individual TOCs to seek remedies against Network Rail where network availability is materially below contractual levels; similarly, there have been disputes under the PPP about whether the Infraco is required to undertake certain works to deliver the line upgrades, and contractual disputes about the costs, which essentially duplicate the ability to refer matters to the Arbiter in an Extraordinary Review.

There is an obvious risk that if contractual dispute resolution covers similar ground to regulatory decisions this will potentially lead to an outcome different from that of the 'regulatory' route, given the different criteria and analysis which may be used. Subsequent regulatory consideration would then either need to 'ring fence' the outcome of the dispute resolution, or potentially put it aside. The first outcome risks distorting incentives, given that regulatory consideration of efficient delivery needs to be 'in the round' (as indeed is explicit in the guidance to the Arbiter on the Notional Infraco); the second risks creating regulatory uncertainty (as well as duplication of cost and effort).

Greater clarity on the criteria to be used in deciding whether issues are dealt with through regulatory mechanisms or contractual dispute resolution would, in my view, be desirable.

This links to the third point, about modifying contracts and licences. Again, at first sight, there is a big difference between the two mechanisms: a contract contains specific legal provisions and can only be modified by agreement; a licence can contain general provisions (as with condition 7 in Network Rail's

¹⁴ Water companies can, for example, be given 25 years notice of termination of the licence. This has the effect of making the licence effectively a 25 year rolling contract.

licence) and can be modified either by agreement or following reference to the CC.

However, there is a different view of the appropriate approach to contract law which narrows these differences. Under this approach¹⁵, a contractual relationship reflects three elements: the ongoing business relationship, the economic deal between the two parties and the contract documentation; and legal regulation of contract is – or at least should be – more interested in the first two elements than the third¹⁶. Given that, no matter how well drafted legally, no long term contract can be complete in the sense of identifying how every contingency will be dealt with, then a clear understanding of the principles for the allocation of risk between the parties is key to an effective business relationship. But that is as true of a licence framework as a contractual one.

On this analysis, the PPP is much more like the licence framework applying to Network Rail than to the access contracts between Network Rail and TOCs: the output specification is in some important respects broad; there are provisions for Periodic Reviews of obligations and pricing, overseen by an independent statutory person or body; there is no attempt to define important concepts such as efficiency and economy. The role of London Underground in deciding required outputs within a funding constraint is similar to that now applying to the Secretary of State in the heavy rail sector. Even the presumption of trying to negotiate much of the detail of a Periodic Review between the Infracos and London Underground which is a feature of the contractual framework in the PPP is now being mirrored in the 'constructive engagement' between airlines and the British Airports Authority promoted by the CAA.

But there are limits to this convergence. If a regulator considers that licence obligations need to be clarified or tightened, or the structure of incentives changed, then in the majority of cases these changes are agreed without the need to involve the CC. Condition 7 was itself a change agreed by Railtrack plc, rather than being in the licence originally issued by the Secretary of State. By contrast, improvements in incentives may be more difficult to achieve under a contractual structure, even where they may currently appear perverse. Introducing the 'glide path' for sharing efficiency savings that is now a feature of water and energy price controls would be equally applicable to the PPP, but this would require a contractual change to be negotiated. Such a change cannot be imposed by the Arbitrator¹⁷.

¹⁵ As set out, for example, in "Regulating contracts", Hugh Collins, Oxford University Press, 1999. Collins suggests (page 117) that "it can be said with only a little exaggeration that the principal purpose of making contracts is to avoid the need to rely on the law of contract".

¹⁶ "The major determinant of litigation consists in the breakdown of the long-term business relations of trust and confidence", Collins (op cit), page 324.

¹⁷ These issues are discussed in "Reference for guidance by Tube Lines Limited: Investment which straddles the Periodic Review", 8 November 2006, at http://www.ppparbiter.org.uk/files/uploads/n_guidance/200611811558_Tube%20Lines%20straddling%20reference.PDF.

Tentative conclusions

In this lecture, I have compared the London Underground PPP with the heavy rail sector, and other regulated utilities, in respect of industry structure, the role of the regulator, the assessment and promotion of operating and financing efficiency, and form of regulation.

In respect of industry structure, it seems clear that different structures can have an important effect on how incentives work and on efficient delivery of outputs to final customers. In that respect, I remain of the view I expressed 3½ years ago in my first Beesley lecture¹⁸, that the allocation of responsibilities under the PPP has much to commend it. The structure of the heavy rail sector in practice constrains the ability of the regulator to promote efficiency in some parts of the industry, as evidenced for example by the issues raised in ORR's current consideration of the passenger rolling stock leasing markets. ORR has set out how the operation of the rolling stock leasing market is affected both by the structure of franchise agreements and by the staggered timing of franchise reletting¹⁹.

Turning now to the difference in the roles of Arbiter and economic regulator, it seems to me that these are not as significant as might at first sight appear. Moves to increase the role of customers in sectors such as airports, and to lighten the touch of regulation more generally on the one hand, and the ability I have as Arbiter to influence the relationship between the Parties on their approach to Reviews and other key commercial issues arguably contribute to a degree of convergence. Certainly the role of Arbiter requires, in my view, a permanent (albeit small) office, with ongoing assessment of Infraco performance against the contractual tests of efficiency and economy and of Good Industry Practice, if it is to deliver the intended purpose. In that sense, it is certainly closer to a regulator than to an arbitrator or adjudicator.

I have argued that the approach to the assessment of 'operating' efficiencies is – despite differences in terminology – broadly similar as between the PPP Agreements and traditional economic regulatory approaches. As a consequence, there are real opportunities to learn from experience for example in the use of benchmarking and to compare performance between the Underground and heavy rail sectors.

Although financing structures are coming from different directions – from a PFI project finance structure in the case of the PPP – again there is a significant degree of convergence with increased gearing and use of structured finance in

¹⁸ "Regulating London Underground", November 2003, at [http://www.ppparbiter.org.uk/files/uploads/f_articlesLectures/200631414321_The%20Annual%20Beesley%20Lecture%20Regulating%20the%20London%20Underground%20\(13_11_03\)%20DM11281v1.PDF](http://www.ppparbiter.org.uk/files/uploads/f_articlesLectures/200631414321_The%20Annual%20Beesley%20Lecture%20Regulating%20the%20London%20Underground%20(13_11_03)%20DM11281v1.PDF).

¹⁹ See "The Leasing of Rolling Stock for franchised Passenger Services: Consultation on the findings of ORR's market study and on a draft reference to the Competition Commission", 29 November 2006, at <http://www.rail-reg.gov.uk/upload/pdf/308.pdf>.

the utility sectors. So here too there can be sharing of learning between the sectors.

When it comes to the core issue of contract versus licence, it has to be recognised that in some sectors, such as rail and energy, regulation is in reality a mixture of licence and contracts. This raises real practical issues about where the boundary most appropriately lies, where practice has perhaps been in need of clearer criteria.

Contrasting the PPP structure with, say, the water sector perhaps gives a fairer basis for considering the effectiveness of the different approaches. The obvious difference is between a fixed period contract under the PPP and what is effectively a rolling contract for water companies. It seems clear that the period remaining under the contract will become an issue for the PPP, although perhaps not until the second Periodic Review in 2017.

I have suggested that the main difference between contract and licence mechanisms is the greater ability to modify a licence – with the possibility of a reference by the regulator to the CC if changes cannot be agreed. In practice, this ability to refer matters to the CC, given what seems to be a desire on the part of companies to avoid such references, has given regulators the ability to make quite significant changes to licences, as with the introduction of Condition 7 into Railtrack's licence by ORR.

By contrast, the PPP Agreement only envisages changes at the time of Periodic Review, and even then relating more to requirements and pricing than to contractual structure. Indeed, the PPP Agreements give the Infracos a significant degree of protection if there is judged to be a 'material change in risk'.

In my 2003 Beesley lecture, I concluded (less than two years into the PPP contracts), that differences in industry structure might be more important than differences in regulatory structure in promoting efficiency. This was in part based on the view that the approach to contract management by London Underground and the Infracos should and would reflect the economic intention underpinning the PPP rather than simply the words on the page of the contracts themselves.

Recent experience with the PPP perhaps questions this optimism. Major issues are still being taken through the contractual dispute mechanism. London Underground has not so far been able to resolve the issues faced by Metronet of delivery which is slower than required by the contract but at a higher price than in the bid – in clear contrast to the ability of the Rail Regulator to push through a full re-baselining of Network Rail's costs and outputs in the 2003 Interim Review. Experience with franchise agreements similarly suggests that contractual mechanisms may not be able to deal effectively with major changes in costs and revenues, particularly where these reflect changes in the external environment within which a franchisee is operating.

Equally, it seems easier to change the incentive structure within a licence framework than a contractual one, if perverse incentives are identified.

The forthcoming Periodic Review of the PPP Agreements will therefore be a key test. If the Parties are able to agree changes in the incentive structures where there are weaknesses, learning from the experience of the regulated utilities, then the outcome in terms of efficient delivery of customer requirements could be very similar to that achieved by economic regulators – even with an Arbiter reacting to disputes rather than driving the process. But if these opportunities cannot be taken, then the superiority of a licence structure will have been demonstrated.

Annex 1

The Notional Infraco

(a) Definitions

Notional Infraco means an assumed entity that has taken over Infraco's responsibilities as at the Transfer Date, that carries out its activities in an overall efficient and economic manner and in accordance with Good Industry Practice, that has the characteristics set out below and also has Infraco's responsibilities for future performance of the Contract. The characteristics are that the assumed entity:

(a) by the time of any Periodic Review, has performed the activities that an efficient and economic Infraco would have performed in prior Review Periods so as to be reasonably certain of its ability to perform obligations that are due for performance in that and subsequent Review Periods;

(b) in the next Review Period, will perform the obligations that are due for performance in that Review Period and the activities that an efficient and economic Infraco would perform in that Review Period so as to be reasonably certain of its ability to perform obligations that are due for performance in a subsequent Review Period;

(c) has the same contractual commitments to third parties as Infraco actually has to the extent that these relate to:

- (i) performance of the Infraco Obligations; or
- (ii) performance of obligations that London Underground modifies or discontinues through the Restated Terms;

and, in either case, such contractual commitments are consistent with Infraco performing its obligations in an overall efficient and economic manner and in accordance with Good Industry Practice;

(d) has the same funding arrangements as Infraco actually has, to the extent that these are consistent with Infraco performing its obligations in an overall efficient and economic manner and in accordance with Good Industry Practice, and where further finance is required for the future performance of its obligations and activities (other than to meet Net Adverse Effects in excess of the Materiality Threshold), will procure finance in an efficient and economic manner both as to the proportions to be contributed by equity and debt and to the cost of the debt assuming the equity to be remunerated at the Equity Rate of Return; and

(e) assesses operating and capital costs as it would when entering into a contract after a competitive tendering process in respect of the relevant activities and having regard to:

- (x) the risks associated with individual activities (including the risk of cost overruns and ISC Adjustments);

(y) the risk that it may have to undertake activities which it has not expected to have to carry out; and

(z) the probability that in the management of a portfolio of activities, the actual cost of some individual activities will exceed the costs allowed, and the actual costs of other individual activities will be less than the costs allowed.

(b) Guidance

The Parties' guidance to the Statutory Arbiter is that what should be expected of an Infracore working to Good Industry Practice is:

- (a) establishing and maintaining whole life asset planning and maintenance regimes;
- (b) considering the issues relevant to each stage in any project and putting in place a strategy to deal with them;
- (c) ensuring the right competence is available, including appropriate external advice when needed;
- (d) planning for operational, contractual and financial contingencies;
- (e) recognising that systems and assets must be useable in practice and taking appropriate steps to ensure this, looking at comparable industries where relevant and taking account of practical constraints;
- (f) recognising the time and resources needed for systems integration and taking appropriate steps to make it possible;
- (g) understanding the degraded operation of complex systems so as to ensure controlled degradation;
- (h) planning, and monitoring projects effectively, and monitoring and taking account of critical constraints;
- (i) designing to take account of buildability and operational constraints; and
- (j) effective change management.