

## **Regulating London Underground**

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**PPP Arbiter**

### **Introduction<sup>1</sup>**

My job title – which is, in the Greater London Authority (GLA) Act 1999 which establishes the role, the ‘Public-Private Partnership Agreement Arbiter’, or ‘PPP Arbiter’ for short – is perhaps not the most self-explanatory. The reaction from most people is ‘What is the PPP?’ More informed audiences, such as this, do not need to have those initials expanded, and generally understand that my role relates to the London Underground PPP. But almost everyone still asks ‘What does an Arbiter actually do?’

At least the job title does make the point that my role is one of an Arbiter – not regulator, or for that matter arbitrator – and that the Arbiter is concerned with specific contracts, not companies or a particular utility sector. So the title of this lecture is misleading. If ‘regulation’ is defined as consumer protection achieved through continuity of service and safe and efficient delivery, while allowing a reasonable return for efficient service providers, then no one person ‘regulates’ London Underground. Certainly as Arbiter I do not.

The PPP arrangements for London Underground are new and still relatively unfamiliar. The model adopted by London Underground Ltd (LUL) for the PPP is fundamentally different to that familiar in other infrastructure sectors, including the national rail network; and the role of Arbiter has no close parallels – either in the UK or (so far as I am aware) internationally. So I will start by describing the PPP Agreements and the Arbiter’s role within them. I will then contrast these arrangements with those applying to regulated networks and to Private Finance Initiative (PFI) projects, under three broad headings:

- the allocation of responsibilities between the different players;
- the handling of important ‘technical’ issues such as establishing efficient costs and allowing for appropriate financing costs; and
- the provisions for amending ‘contracts’, and the respective roles of customers and regulators.

As well as highlighting similarities and differences, I will draw some tentative conclusions about the pros and cons of the different models. I also identify areas where further consideration may need to be given to consistency of approach and the possible case for future convergence.

### **An outline of the PPP Agreements<sup>2</sup>**

LUL has entered into three PPP Agreements for the maintenance and enhancement of its infrastructure over the next 30 years. Under these PPP Agreements, three private sector companies (Infracos) have been contracted to maintain, renew and upgrade discrete parts of LUL's infrastructure – track, stations and rolling stock. LUL will remain responsible for delivering services to customers. Two of these contracts have been awarded to the Metronet consortium, which took control of the Sub Surface Lines (SSL)

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<sup>1</sup> This lecture reflects my proposed approach to the role of PPP Arbiter as set out in OPPPA (2003). It was prepared before consultation responses were received and considered.

<sup>2</sup> For further details of the PPP deliverables, see TfL (2003). Details of the shareholders in the three Infracos are at Annex 1.

and Bakerloo, Central and Victoria (BCV) lines on 4 April 2003. The other contract, for the Jubilee, Piccadilly and Northern (JNP) lines was awarded to Tube Lines and commenced on 31 December 2002.

The PPP enables an intensive programme of work on a scale never previously undertaken on the Underground. The PPP Agreements deliberately do not specify the work to be undertaken, and set deliverables in terms of the service provided to passengers. To meet the output specifications in the contract, the Infracos' plans include:

- 336 new trains by 2014 and an additional 42 trains by 2019;
- all rolling stock currently more than 10 years old replaced by 2019;
- all lines to have modern signal and control systems by 2016, providing automatic train operation and automatic train protection;
- a total of 80% of the Underground's 400-plus kilometres of track replaced over the life of the contract;
- capacity increased within 10 years by 22% on the Jubilee line; 14% on the Victoria line; and by 18% on the Northern line, with increases on other lines over the period of the Agreements;
- ten of London's busiest stations modernised or refurbished within 10 years: Oxford Circus, King's Cross, Liverpool Street, Piccadilly Circus, Waterloo, Leicester Square, Tottenham Court Road, Charing Cross, Paddington and Victoria;
- a programme of modernisation and refurbishment at other stations, including a network of 'step-free' stations, with ongoing refurbishments every 7½ years; and
- all infrastructure fully maintained and renewed to achieve a network-wide state of good repair by the end of the third review period.

The PPP Agreements create a long-term relationship between LUL and each Infraco, many aspects of which are fixed at the start. However, the designers of the PPP concluded that it would not be practical for Infracos to submit fixed prices for the whole 30 years, nor would it be good value for money. Similarly, LUL could not confidently predict its service requirements for the distant future. So the Agreements allow LUL to restate its requirements for the service to be delivered at Periodic Reviews every 7½ years<sup>3</sup> and for the Infrastructure Service Charge (ISC) payable to the Infracos to be reviewed to reflect changes in costs for an efficient 'Notional Infraco'.

The required deliverables result in a front-loaded expenditure profile, which is not fully reflected in the ISC (Figure 1). So the Infracos are cash-flow negative in the first period, and have put financing arrangements in place to allow for this. Whilst raising broadly comparable amounts within each Infraco (some £4.5 billion in aggregate), these arrangements differ between the two Metronet owned Infracos and the one owned by Tube Lines in the following respects:

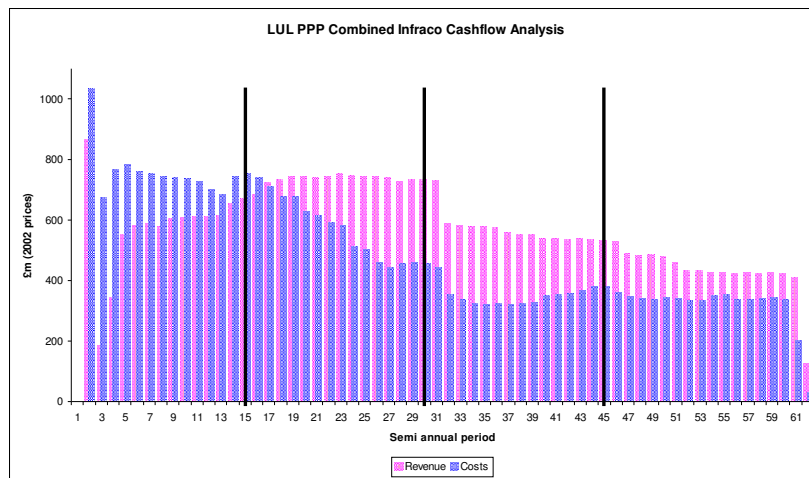
- Metronet has accessed fixed rate and index linked capital markets for a material part of its debt with the remainder coming from the European Investment Bank and other project finance banks; whilst
- Tube Lines has borrowed from the EIB, raised conventional project finance debt and a raised a credit enhanced tranche which has the benefit of a AAA credit rating (but is currently considering a refinancing of these initial arrangements).

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<sup>3</sup> In addition, LUL is able to exercise certain 'specified rights' to modify required services in the early years, for example to add a seventh car to Jubilee Line trains.

**Figure 1**

**Infraco costs and revenues (at 2002 prices)**



**Office of the PPP Arbiter**

Given that the funding arrangements are closer to the project finance model underlying PFI projects than to those familiar in the privatised utility sector, the Agreements contain extensive provisions to protect the position of lenders and allow them to recover their investment (through a process of 'Mandatory Sale') if LUL's requirements change to such an extent that there is a fundamental change to the nature of the deal.

Under the PPP Agreements, requirements are, so far as possible, specified in terms of the service experienced by passengers<sup>4</sup>. There are three main measures:

- capability – measured through reduced journey times as a result of major line enhancements involving expenditure on track, signalling and rolling stock;
- availability – reflecting 'in service' performance of the infrastructure measured through the reduction of delays; and
- ambience – reflecting the condition and cleanliness of trains and stations measured through mystery shopper surveys.

For the purposes of calculating financial abatements and bonuses, actual performance is assessed on the basis of two main measures: Lost Customer Hours and Service Points. In order that incentives on Infracos reflect customer interests, Lost Customer Hours are valued at £6/hour – LUL's estimate of its passengers' average value of time – with rates of £9 above an 'unacceptable performance' threshold, and lower rates of £3 for improvements beyond benchmark.

**Precedents for the PPP**

The form of the PPP has its origins in the model of project financing developed over the last decade in the Private Finance Initiative. But the LU PPP is unique – not just in terms of its scale, but in terms of the pattern of financing and also the change provisions built into the contract from the outset.

<sup>4</sup> The main exception is in respect of station refurbishment and modernisation.

Although the intention, in entering into long-term contracts, is to improve incentives on the Infracos to look at whole life costs and performance, as with a DBFO (Design, Build, Finance and Operate) contract, the PPP does not have distinct 'build' and 'operate' phases. This has a number of consequences, not least the need for extensive performance arrangements to reflect the complex nature of the service being delivered. But this complexity, and the ongoing nature of the Underground network, makes it more difficult to specify requirements than for a single asset such as a school or hospital<sup>5</sup>.

This, and the corresponding difficulty of capturing long-term future efficiency potential through a competitive tender process, led to the introduction of a Periodic Review mechanism, similar to that in the price-regulated network industries (although at 7½, rather than 5, year intervals). In addition, provision was made for Extraordinary Reviews, similar to the 'shipwreck' clause in water company licences, to allow charges to be modified within a review period if Infracos experience cost shocks outside their control.

Most disputes under the PPP Agreements are dealt with through a contractual Disputes Resolution Agreement involving internal escalation, adjudication and ultimately the Courts. But it was recognised that this was not appropriate for disputes at Periodic and Extraordinary Reviews because of the nature of the issues involved and the need for decisions to be taken independently of the Parties. So the PPP arrangements also provide for the appointment of a PPP Arbiter, who can be asked to determine the key financial terms<sup>6</sup> of the PPP Agreements at Periodic Reviews, and at an interim Extraordinary Review should one be necessary, and to give guidance on any aspect of the Agreements at any time. This is a standing appointment, created by statute, and it was envisaged that the Arbiter would have a small permanent staff to support him<sup>7</sup>. So although the role is not that of a regulator, it is also very different from that of an arbitrator.

I was appointed to the role of Arbiter on 31 December 2002 (the date the first PPP Agreement became operational), for a four year term.

### **The Arbiter: Functions and duties<sup>8</sup>**

The role of PPP Arbiter was established by the GLA Act 1999. The Arbiter is appointed as an individual, with the power to employ staff and incur expenses. Costs are met by the Secretary of State for Transport, although the Arbiter is independent of Ministers (and of the PPP Parties); for example, the Secretary of State can only dismiss the Arbiter on grounds of incapacity or misbehaviour, or where he considers that there has been unreasonable delay in the discharge of the Arbiter's functions.

Under the provisions of the GLA Act, the Arbiter has two principle functions:

- to give directions on matters specified in the PPP Agreements, when referred to him by one of the parties to a PPP Agreement (section 229); and

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<sup>5</sup> This is not to imply that determining the appropriate specification for such projects is straightforward.

<sup>6</sup> This covers both the costs of maintenance and enhancement that would be incurred by a Notional Infraco, and the financing costs of debt and equity funding.

<sup>7</sup> The expectations of the Department for Transport, Local Government and the Regions in 2001 are set out in DTLR (2001).

<sup>8</sup> For further details of the functions and duties of the Arbiter, including extracts from the Greater London Authority Act 1999, see OPPPA (2003).

- to give guidance on any matter relating to a PPP Agreement, when asked to do so by either (or both) of the parties to a PPP Agreement (section 230).

In addition the Arbiter is given further powers ‘for the purposes of the proper discharge of the functions conferred on him’ by the GLA Act (section 232). For example the Arbiter may do ‘all such things as he considers appropriate for or in connection with the giving of a direction or guidance and ... do such other things as he considers necessary or expedient ... for purposes preparatory or ancillary to the giving of directions or guidance generally ... notwithstanding that there is no matter in relation to which a direction or guidance is required’. The powers conferred on me are exercisable therefore on the giving of directions and guidance or in circumstances preparatory or ancillary to the giving of a direction or guidance.

My function in respect of directions is limited by the terms of the PPP Agreements: if there is no specific provision in a PPP Agreement for the Arbiter’s involvement, any disputes are dealt with through contractual routes. Even on matters within my remit for directions, I am only brought in if the PPP Parties fail to agree and seek a direction from me. I therefore have no unilateral power as Arbiter to change, or propose to change, provisions in the PPP Agreements. Even where I have made a direction on a disputed matter within my remit, the PPP Parties may, under the provisions of section 229 (7) of the Act, jointly agree to set aside that direction.

My second function under the GLA Act is to issue guidance on any matter relating to a PPP Agreement, although again only at the request of one (or both) of the PPP Parties. An important issue in developing my future work programme will therefore be to understand from the PPP Parties whether guidance is likely to be sought only on matters where I can also give a direction, or whether they may seek guidance on a wider range of issues relating to the PPP Agreements.

In giving directions or guidance, the Arbiter is under a statutory duty to ‘act in the way he considers best calculated to achieve’ four public interest objectives (section 231). These are:

- to ensure that London Underground has the opportunity to revise its requirements under the PPP Agreements if the proper price exceeds the resources available;
- to promote efficiency and economy in the provision, construction, renewal, or improvement and maintenance of the railway infrastructure;
- to ensure that if a rate of return is incorporated in a PPP Agreement, a company which is efficient and economic in its performance of the requirements in that PPP Agreement would earn that return; and
- to enable the Infracos to plan the future performance of the PPP Agreements with reasonable certainty.

In giving directions or guidance, I am also under a duty to take account of any factors which are notified to me by both PPP Parties, or are specified in the relevant PPP Agreement, as ones to which I must have regard. The concept of ‘taking account of’, or ‘having regard to’, also feature in the legislation governing the sectoral economic regulators. For example, the Rail Regulator is under a duty to ‘have regard to any general guidance given to him by the Secretary of State about railway services or other matters relating to railways’<sup>9</sup>.

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<sup>9</sup> s224(6)Transport Act 2000.

'Taking account of' or 'having regard to' a matter does not mean 'must follow', and does not therefore oblige me to adopt a particular position; in the same way, a requirement to 'take account' of a matter is not the same as being instructed to take a particular approach. But the duty does imply that I must consider the particular matter fully as part of my decision-making process, giving due weight to it and to the expressed intention of the PPP Parties.

The GLA Act does not explicitly prioritise between the four specified objectives in giving guidance or directions. In principle, I will need to consider the interaction between them in exercising my functions. My initial view, however, is that in practice there is unlikely to be significant conflict between them, particularly if decisions are taken only after full and effective consultation.

Similarly, the GLA Act does not prioritise between the duty 'to take account of' factors notified to me by the PPP Parties and achievement of the four objectives other than stating that I 'shall' act in the way best calculated to achieve those objectives. It is possible that a situation may arise where the apparent intention of the PPP Parties may be in conflict with achievement of the four objectives identified in the GLA Act. Where exceptionally I consider that this may be the case, I would expect to set out the reasons for this view, explain how my proposed decision has balanced achievement of my duties and seek representations from interested parties before taking the final decision.

The GLA Act also gives me powers to seek from the PPP Parties, their associates and any PPP related third party such information as I consider relevant to the proper discharge of my functions. Any failure to provide information can lead to enforcement action in the High Court.

Any information provided to me which relates to a particular individual or business can only be disclosed with the consent of the relevant individual or business or in specific circumstances set out in the GLA Act. These circumstances include facilitating the exercise of functions under the GLA Act by the Secretary of State, Mayor and Transport for London (or indeed the Arbiter) or to facilitate Ministers, the Mayor and other regulators to carry out statutory functions under other Acts such as the Railways Act. The provisions of the GLA Act have been amended (through the Railways and Transport Safety Act 2003) to introduce reciprocal arrangements which allow, for example, Ministers and the economic regulators to disclose information obtained under their statutory powers to me.

### **The Arbiter: Contractual provisions**

The main contractual provisions in respect of the Arbiter are contained in Schedule 1.9 to the Service Contracts<sup>10</sup>. They fall into four main categories:

- the specification of matters which can be referred to the Arbiter for direction;
- the process for carrying out Periodic Reviews and Extraordinary Reviews;
- matters which are agreed between the PPP Parties and which they do not require the Arbiter to consider; and
- joint guidance from the PPP Parties to the Arbiter.

Under the provisions of the GLA Act, I can only be asked to give directions on matters specified in the PPP Agreements. For the most part, matters are only referred for direction in the context of a Periodic or Extraordinary Review. However, in addition, all three PPP Agreements allow the PPP Parties periodically to seek direction as to the

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<sup>10</sup> The text of schedule 1.9 is published on the Arbiter's website ([www.ppparbiter.org.uk](http://www.ppparbiter.org.uk)).

amount of cost increases or revenue shortfalls that can be 'logged up' towards an Extraordinary Review.

Schedule 1.9 also indicates the matters that the PPP Parties agree can be referred to me for guidance<sup>11</sup>. The matters are the same as those that can be referred for direction, with one exception: in the Metronet PPP Agreements there is specific provision that my guidance can be sought annually, as from April 2005, in the form of a reasoned report on whether the Infraco has 'performed its activities in an overall efficient and economic manner and in accordance with Good Industry Practice'.

Paragraph 6.6 of Schedule 1.9 indicates that the PPP Parties may agree to 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'. So it is clearly open to the PPP Parties to frame any reference to me for directions to exclude matters which have been agreed between them. However, I am also able to give binding directions on any other matter ancillary or incidental to a matter on which I am requested to give direction. This allows me to deal with related issues that were not raised in a reference, where I consider that this is necessary in order to comply with my statutory duty, although it creates no general requirement to consider issues outside the scope of the reference.

It is possible therefore that I may consider matters covered by paragraph 6.6 as being matters ancillary to the giving of directions or guidance where, for example, this is needed to 'make sense' of the original reference. The scope of matters which are ancillary and incidental to a particular reference will clearly depend upon the precise terms of the reference given to me by the PPP Parties.

The guidance contained in Schedule 1.9 refers explicitly to section 231 (6). The terms of the guidance accordingly constitute factors which the PPP Parties notify to me as ones to which I must have regard in giving guidance or directions. As explained above, I am under a statutory duty to take such factors into account in giving guidance or directions.

The PPP Parties' guidance covers the following main issues:

- 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, with guidance on factors relevant to the assessment of efficient and economic performance and Good Industry Practice;
- the specification of a Net Adverse Effect;
- the treatment of refinancing benefits; and
- the behaviour expected of the PPP Parties operating within a spirit of partnership.

Given the statutory duty on me to take account of the matters contained in the PPP Parties' guidance, I have indicated that I will pay particular attention to it, and to follow it where this does not create a conflict with my other duties. I have indicated that I would expect to explain in any direction or guidance my reasons for departing from the PPP Parties' guidance where I consider that this is required as part of my overall statutory duty.

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<sup>11</sup> This agreement that specific matters may be referred for guidance does not however preclude a Party from seeking guidance on other matters.

## The role: a summary and comparison

The table below (Figure 2) summarises the Arbiter’s role, and contrasts it with a ‘traditional’ regulatory role. Key differences are:

- the restricted remit – not covering for example the specification and enforcement of delivery;
- the reactive nature of the role – only giving guidance or directions when requested by the parties; and
- the possibility of being given ‘narrow’ terms of reference, even at the time of a Periodic Review.

**Figure 2**

### A comparison with regulation: the role

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

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### Office of the PPP Arbiter

## An assessment of the PPP arrangements

The approach adopted for the modernisation of the Underground is clearly very different from that in other UK infrastructure networks, and in particular the national rail network. In contrast to the standard utility model of a privatised company operating under a licence monitored and enforced by an economic regulator, the design of PPP Agreements derive more from a PFI model.

At first sight, the existence of a single public sector body, London Underground Ltd, specifying and purchasing services from private sector Infracos makes a contractual approach look an obvious choice. But the nature of the deliverables – ongoing maintenance and enhancement of an existing network rather than construction and operation of an asset on a green-field site – and the need to allow for the specification of deliverables to change over the contract period make this a far from typical PFI project. Also, a licence structure could still accommodate the existence of a single direct ‘customer’ – not least given that there are millions of individual users of the Underground dependent on the services provided.

In terms of the closest parallel, the national rail network, we might ask whether the situation on the Underground is really that different from the Strategic Rail Authority (SRA) specifying the services it wants to run on Network Rail's network<sup>12</sup>. And if the economic reality is in fact similar, why are the contractual and regulatory arrangements so different?

In order to assess the similarities and differences between the London Underground PPP arrangements and the standard utility model, I will consider three broad aspects of the arrangements:

- the underlying customer/client structure, with particular reference to the national rail network;
- the basis on which common 'technical' issues such as establishing efficient costs and allowing for appropriate financing costs are handled under the two models; and
- the provisions for amending 'contracts', and in particular the contrast between contractual and licence models.

## **Structure**

There have been many comments on the restructuring of British Rail, when the single vertically integrated nationalised industry was broken into over 100 separate companies, linked together by contracts with Government (through the franchising agreements with OPRAF/SRA) and with each other, through licences, and multilateral industry arrangements. My purpose here is not to assess that restructuring<sup>13</sup>, but to compare it with that put in place for London Underground under the PPP arrangements as a basis for understanding the strengths and weaknesses of the different models.

### ***Comparison with the national rail industry structure***

The PPP model is in essence very simple: LUL, a public sector company (whose ownership transferred from the Secretary of State to Transport for London on 15 July 2003) has overall responsibility both for specifying services and operating the network – ie signalling, trains and stations. Three private sector Infracos maintain and upgrade the infrastructure – track, trains and stations – on different parts of the network. Those Infracos take full responsibility for procuring the services needed to deliver their contractual obligations, and are doing so through a combination of in-house resources, single-tender supply chain contracts and competitive tendering. In line with this division of responsibility, other line-specific contracts (such as the PFI contract for the supply and maintenance of trains on the Northern Line) have been novated from LUL to the relevant Infraco. Only system-wide contracts, such as that for the provision of power supplies, have been retained by LUL.

The contrast with the national rail sector is marked. Figure 3 shows the primary responsibility for different aspects of the business in the national rail sector and in the

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<sup>12</sup> Albeit that in that case of the national rail network, train operations are also outsourced.

<sup>13</sup> Previous Beesley lectures have considered these issues in some detail, for example Beesley (1997) and Helm (2002).

Underground<sup>14</sup>. In the LUL PPP arrangements, responsibilities lie either with the Infraco or with LUL. In the national rail sector, responsibilities are more diverse<sup>15</sup>.

**Figure 3**

**A comparison with the national (passenger) rail sector**

Prime responsibility for:		
Strategy and service specification	SRA	LUL
Network ownership	Network Rail	LUL
Network operations (signalling etc)	Network Rail	LUL
Train operations	TOCs	LUL
Station operations	TOCs, Network Rail (major stations)	LUL
Network maintenance and renewal	Network Rail	Infracos
Network enhancement	Network Rail, SPVs	Infracos
Rolling stock	TOCs, ROSCOs	Infracos

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But while it is easy to identify these differences, what are the relevant criteria for assessing the pros and cons of the different models?

***Planning v market mechanisms***

One possible criterion is whether there needs to be a single strategic focus for planning and specifying requirements for the infrastructure, or whether this can be left to bilateral contracts or to market mechanisms.

In the gas sector, for example, Transco has (under pressure from Ofgem) developed long term auctions of system entry capacity for its transmission system, allowing for additional capacity to be constructed where auction bids are sufficient to fund this, at least up to the next price review. In a similar way, the original vision for the national rail network was for Railtrack to develop its network where this could be justified commercially by higher access charges paid by individual train operators<sup>16</sup>. Critics have argued that relying on bilateral commercial mechanisms will result in inadequate network provision<sup>17</sup>, and that investment either needs to be underpinned by centrally determined standards, or set by a strategic planning body.

<sup>14</sup> In both sectors, some of the primary responsibilities are delivered through contracts. Thus, for example, track renewal is delivered through contracts rather than in-house staff in both sectors.

<sup>15</sup> Even in respect of service specification, the strategic role of the SRA is diluted by the responsibilities of, for example, the Passenger Transport Executives in their areas of responsibility.

<sup>16</sup> Department of Transport (1993).

<sup>17</sup> See for example Stern and Turvey (2002).

In essence, therefore, the issue is whether consumer needs – in terms of the appropriate balance between price and standard of service – are best met through a planning mechanism or through a decentralised market.

Characteristics which will help to determine the balance between planning and market-based approaches include:

- the extent to which demand depends on the existence of a network, rather than simply point to point flows, and the consequent need for coordination of service provision and investment across the network;
- the costs of supply interruptions to individual users, and whether these can be properly captured through market mechanisms (ie the scale of ‘free-rider’ problems);
- whether there is effective competition for the product being supplied;
- whether the direct customers of the infrastructure company compete, and consequently reflect their true valuation of network capacity in contracting for capacity on a long term basis; and
- the need for locational (as opposed to system-wide) price signals to incentivise investment properly.

In the case of London Underground, it is clear that passenger demands depend in part on other aspects of transport and planning policy, which is in part the rationale for creating a body such as Transport for London with overall responsibility for all modes of transport. Given the limited development of market mechanisms in other modes, and the clear evidence that policy decisions in respect for example of bus use and congestion charging will have an impact on Underground patronage, the need for a single strategic body to specify requirements is clearer than for some other networks.

### ***The public/private split***

Although, almost by definition, a strategic planning function needs to be located within a strong public interest framework, this could be provided by statutory controls or licences (eg the requirement on Transco to provide capacity to meet expected demand on a 1 in 20 year cold winter day) rather than through public provision. In principle, therefore, train and station operations on the Underground could be provided through outsourced contracts, in the same way that the SRA procures train operation services through contracts with train operators, or through licences. Although common standards and a common ‘appearance’ is obviously important for the Underground, this could be achieved through outsourcing as with London buses. Indeed, most franchising operations are designed to achieve that commonality (unlike those for train operations, where the original aim of promoting competition *in* the market as well as competition *for* the market made differentiation an objective of policy).

In some ways, the most important issue for effective operation of the network is not whether train operations and infrastructure management are undertaken in the public or private sectors but how network operation objectives can best be aligned with user requirements. This alignment can be achieved through incentives on private operators (as with the system operation incentives schemes for National Grid and Transco) and does not necessarily require public provision. But where the only mechanism for delivering appropriate coordination is through a series of bilateral contracts rather than through a licence, effective private operation of the network may be difficult to deliver<sup>18</sup>. So it is not surprising that network operation has been retained by LUL.

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<sup>18</sup> For example, recent changes to the priority given to long distance passenger services on the national rail network, to avoid situations where small delays cumulate into significant

### ***Minimising transaction costs***

This discussion does, however, beg the question which has underpinned much of the discussion about the PPP, namely whether the problems of managing contractors on a network where safety considerations dominate are so great that all activities need to be controlled by one body – LUL in the case of the Underground.

One framework for assessing these issues is that provided by Coase in his discussion of the nature of the firm<sup>19</sup>: are the benefits of external contracting in terms of lower prices greater or less than the transaction costs involved to deliver the same standards (including safety, and risk of service interruption).

Where goods or services are relatively standardised and are supplied by a number of firms, the case for outsourcing is overwhelming. Very few firms make their own paperclips! But already questions are being asked about whether the recent (and apparently inexorable) trend towards outsourcing of services such as IT is in fact delivering lower costs (for the same service standard) than in-house provision.

On question that is relevant for many network industries is whether supply markets are sufficiently competitive to ensure that effective procurement delivers efficient prices. If they are not, companies risk becoming dependent on particular suppliers. Although the challenge of discovering competitive prices is emphasised by Coase as one of the costs of contracting, a more significant cost for a safety-critical network is likely to be that of ensuring delivery to appropriate standards (particularly where requirements are specified in terms of outputs, as makes sense if suppliers are to be incentivised to innovate) and of coordinating between different suppliers where safe operation of the overall system depends on such coordination.

This issue has been at the heart of debate in the national rail network about the consequences of splitting the ‘track/wheel interface’, and more generally about using contractors to carry out work on the network, particularly for routine maintenance. As the Health and Safety Commission noted in its report on the use of contractors in the rail sector, ‘contractorisation is a feature of all industrial sectors worldwide [and] there are well-established principles for good contractor management that, if followed, will provide the basis for safe operation; [however] recent rail history indicates that there have been significant problems related to contractor management’<sup>20</sup>.

There are two main differences between the PPP arrangements and those which have applied in the national rail sector hitherto:

- the Infracos are responsible for both track and rolling stock maintenance and renewal, thereby ensuring that there is one body responsible for decisions across the track/wheel interface; and
- Infracos generally use in-house staff (who in the main are the same people as previously employed by LUL) for routine maintenance, with contractors only used for renewal and enhancement projects<sup>21</sup>.

In addition, the three-year period of ‘shadow running’ of the PPP contractual arrangements before transfer of the Infracos to their new private owners allowed many of the interface issues to be resolved before transfer.

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disruption for individual services, were achieved following SRA intervention rather than through bilateral negotiation.

<sup>19</sup> See for example Coase (1937).

<sup>20</sup> HSC (2002).

<sup>21</sup> The recent decision by Network Rail to bring track maintenance in-house therefore brings its structure into line with that of the Infracos in this respect.

### ***The length of contracts***

A further difference between the two sectors is in respect of the contractual structure itself. The length of contracts in the national rail sector varies, but all are of significantly less than the 30 years of the PPP Agreements. In large part, the 30 year period for the PPP was driven by the need to have a sufficiently long period to accommodate the work needed to modernise the network, and to provide for the remuneration of the private sector financial input. By contrast, investments in station facilities and rolling stock by train operating companies could generally be funded over no more than 15 years, making this the maximum length of the initial franchises on the national rail network.

There is, however, a further difference which is worth considering, namely the trade-off in terms of incentives between a longer contract with periodic reviews, as with the PPP, and shorter contracts with no explicit review provisions. In the case of the initial train operator franchises, many were let on 10 or 15 year periods with no review provisions. The key economic question is whether the existence of reviews which effectively re-base costs to efficient levels (as well as allowing for requirements to be restated) will undermine the incentives to manage assets on an efficient whole life basis. The answer to this question depends in large part on the techniques used to judge efficient costs, to which I turn shortly.

In practice, none of the original 15 year rail franchises have survived. They have all either been shortened (and in one case terminated), or converted into management contracts. While it is too early to judge the robustness of the PPP Agreements, it is therefore very clear that long term contracts with no explicit review provisions have, in the national rail sector, proved to be unsustainable.

### ***Fixed contract v rolling licence period***

A further important difference in contractual structure is between a contract which has a fixed end point, as with the PPP, and perpetual contracts with rolling notice periods.

There are obvious problems with 'rolling' contracts if that notice period is too short: in the case of the water industry, for example, the notice period has recently been extended from 10 years to 25 years, on the grounds that it would 'provide greater regulatory stability, assist companies' long-term planning, deliver a lower cost of capital and better reflect the lives of the assets of the industry' (Ofwat, 2002).

However, there are also problems with fixed-period contracts as the termination date approaches if appropriate incentives to invest and to continue to improve efficiency are to be maintained. Again, experience with the passenger train operator franchises is illuminating: there have been numerous short-term extensions, and, where a franchise has been awarded at renewal to a new operator, that operator has generally taken over the remaining period of the existing franchise<sup>22</sup>. But whether these issues will start to affect incentives from, say, the middle of a 30 year contract, or only start to create problems in the last few years is more difficult to judge. Important issues in practice will be the effectiveness of the termination arrangements, and the willingness and ability of LUL to assume (and transfer to new operators) liabilities reasonably taken on by the existing Infracos in the later part of the contract period.

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<sup>22</sup> For example, the South Central franchise was taken over by the new operator, GoVia, two years before the end of the previous franchise.

The other important factor in deciding between a perpetual licence and a fixed period contract is the value to consumers of retaining the ability to re-tender a contract other than on the grounds of failure to perform: will this add sufficiently to competitive pressures to improve efficiency when contracts are re-awarded to outweigh the transaction costs? Evidence on this issue is, at best, mixed. In the national rail sector, the existing involvement of the SRA in investment decisions, including its ability to under-write rolling stock leases to avoid terminal value risk being reflected in leasing charges, means that management of a train operating company can be transferred reasonably easily – even to an ‘in-house’ management team as with the South Eastern franchise.

The more the transition requires effective due diligence of the existing operation to support bids, including for example valuation of work in progress, and the greater the extent of new staffing and supply chain arrangements that have to be put in place by a new operator, the less effective will competition for the market be at a retendering. Artificially levelling the playing field, as happened with the re-award of the National Lottery franchise by requiring the existing operator to replace all its equipment as part of the new bid, may simply increase transition costs to a level which outweighs the potential benefits of improved competition.

There are, nonetheless, issues with a evergreen contract, particularly if the periodic review process is seen as in effect creating separate five-year contracts. The impact this can have on incentives has been widely recognised<sup>23</sup>. Allowing for efficiency savings to be retained for a five year rolling period is one way of reducing these effects.

While it seems clear that long-term contracts with no review provisions are generally inappropriate for circumstances such as the PPP, the balance between an evergreen licence and fixed period contract is more difficult to assess. Much will depend on the expected scale of the benefits from improved long term incentives and from locking in higher efficiencies at retendering in the PPP, and whether the more restrictive framework created by a project finance model for the PPP Agreements makes it more difficult to achieve levels of financing costs comparable to those in the privatised utility sector. This in turn depends on the provisions for amending the contracts, considered below.

### ***Conclusions on structure***

So what conclusions can be drawn on the structure adopted by the PPP arrangements for London Underground, at least in comparison with those for the national rail network? Although there are clearly many issues with the PPP which cannot be assessed at this early stage in the life of the Agreements, I suggest there are two main features which tend to favour the PPP arrangements:

- the smaller number of direct contractual relationships, and in particular the responsibility of Infracos for both track and signalling and rolling stock maintenance and renewal; and
- the clear ‘customer’ focus on LUL, within Transport for London, which is not mirrored in the national rail network.

### **Analytical framework**

The area where there is in principle greatest commonality between the work I need to undertake as PPP Arbiter and that of the economic regulators of network industries is in the analysis of factors such as efficiency and financing costs. Even here, though, the

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<sup>23</sup> For example in NAO (2002).

approach adopted in the PPP Agreements differs from the traditional utility approach. Some of these differences are set out below:

**Figure 4**

**A comparison with regulation: analytical framework**

UK regulation	PPP
<b>'Economic &amp; efficient'</b>	
➤ Adjustments to base year	➤ Costs incurred by notional 'good (ie not 'best') practice' Infraco
➤ Capex and opex efficiency targets – approach to frontier	➤ Use of contract prices
➤ Use of comparators/benchmarks	➤ Scope for benchmarking?
<b>WACC</b>	
➤ Single WACC used in assessing allowed revenue	➤ Separate consideration of new/old debt/equity
➤ Optimal not actual gearing?	➤ Market testing for new debt
➤ Embedded debt cost not generally allowed	➤ Arbitrator may be asked to determine return on new equity
<b>RAB</b>	
➤ Based on initial flotation value	➤ No RAB, but consider financing of 'logged up' costs at Periodic Review
➤ Logging up between reviews	

**Office of the PPP Arbitrator**

But are these differences more apparent than real?

**Assessing efficiency: the concept of the 'Notional Infraco'**

In the PPP Agreements, adjustments to costs are made by reference to those that would be incurred by a 'Notional Infraco'. The Notional Infraco is defined as being '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 ...' Good Industry Practice is in turn defined as meaning '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 ...'

The guidance from the Parties to the Arbitrator expands on these definitions. For example, it says that 'what should be expected of an Infraco 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.’

The guidance also emphasises the distinction between good and ‘best’ practice, and indicates for example that the Arbiter should not base his determination on ‘an assumption that all the Infracos could reasonably be expected to achieve the financial performance previously demonstrated by the best Infraco, unless there is a clear reason for this assumption’.

At first sight, this specification of a Notional Infraco is rather different from the approach used by utility regulators of assessing an efficiency frontier and the appropriate speed of movement towards it for individual companies. However, the difference is perhaps more apparent than real: in both cases the intention is to determine the cost of a ‘reasonably’ efficient company, leaving opportunities for individual companies to out-perform the cost allowance. Thus in advising me on the relevance of the practice of utility regulators, Cambridge Economic Policy Associates (CEPA) concluded that ‘the concept of the Arbiter seeking to determine the costs that would be incurred by a ‘Notional’ Infraco that carries out its functions in a economic and efficient manner is the same as for utility regulators’<sup>24</sup>.

There remain, however, possible differences in the information available to the Arbiter, and the relative weight given to different benchmarks in reaching his decisions. An early priority for my Office is therefore to put in place a framework of appropriate measures, supported by the relevant information flows, both to monitor outturn against the original financial model (updated for any agreed changes in deliverables) and to compare performance with appropriate benchmarks.

### ***Assessing efficiency: reliance on competitive tendering***

A particular feature of the PPP arrangements is that, as well as tendering the initial contracts, the contracts establish a presumption that subsequent competitive tenders for subcontracts should be the basis for judging the costs of the Notional Infraco – always assuming that appropriate procedures have been followed in order to obtain the best market price.

This too may appear to be a rather different approach from that adopted by economic regulators, who generally focus on costs at the level of the regulated company and do not regard themselves as being bound by costs under existing subcontracts or the

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<sup>24</sup> CEPA (2003).

outcome of forward-looking tender exercises. Nevertheless, in assessing the scope for future efficiency savings, regulators have often reviewed procurement practices<sup>25</sup>.

This issue has added significance because of the rather different approaches to the supply chain adopted by the two Infraco consortia. In the case of Metronet, the main contracts were put in place with its sponsors concurrently with financial close. In the case of Tube Lines, major supply contracts have been awarded by competitive tender following financial close<sup>26</sup>. Although the guidance from the parties specifically recognises that different approaches to procurement can be consistent with Good Industry Practice, Infracos will still need to demonstrate how their approach going forward takes account of changes in infrastructure services supply markets to ensure that subcontracts continue to be economic and efficient<sup>27</sup>.

### ***Allowing for financing costs***

The PPP Agreements take a similar market-based approach to financing costs. The Agreements distinguish between 'base' and 'additional' finance (ie in broad terms between that committed at financial close, and the further finance to be raised either to meet existing obligations in future review periods or new requirements established by LUL). In brief, the contracts assume that, provided the Infraco has operated in an efficient and economic manner:

- Infracos will receive the equity returns specified in the contract in respect of base equity (which is indeed one of the objectives specified in the GLA Act);
- base debt costs will in effect be passed through;
- additional debt costs will be passed through on the basis of advice to the Arbiter from a 'financial adviser of international repute', which is to be based on 'preparation and circulation of an appropriate Information Memorandum to interested parties and the indicative commitments they are willing to offer in response and the terms of offers of finance that Infraco may reasonably expect to be able to obtain in those markets'; and
- the cost of additional equity may be referred to the Arbiter for determination.

In addition, the Agreements contain specific provisions in respect of sharing the benefits of any refinancing, broadly reflecting PFI precedents.

If Infracos did not need to raise additional finance over the life of the Agreement, and operated in an economic and efficient manner, then any change to the ISC at Periodic Review would effectively pass through the cost of embedded debt and preserve the initial equity return. But in practice additional finance will almost certainly be required.

While the fixed term of the PPP Agreements creates particular challenges for funding at later reviews, reducing opportunities for long-term funding unless arrangements can be made for LUL to take responsibility for funding after the end of the contract, the issues are otherwise similar to those considered by economic regulators in assessing the weighted average cost of capital for network utilities. In particular, in determining the appropriate return on any additional equity, the Arbiter would need to consider the overall risk profile of the Infraco, and whether this had changed since the contract was

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<sup>25</sup> See for example the review by Accenture of Network Rail's procurement practices in ORR (2003).

<sup>26</sup> For example, a track renewal contract has been awarded to Grant Rail, with Jarvis (one of the Infraco shareholders) being an unsuccessful bidder.

<sup>27</sup> For a discussion of some of the issues to be considered in awarding contracts, and the circumstances in which this can deliver results which are superior to traditional regulation, see for example Littlechild (2002).

originally awarded, changes in market returns, and the impact of gearing and taxation. I have argued elsewhere<sup>28</sup> that there remain differences in approach between the economic regulators on issues such as the cost of capital which are not fully explained, and that this risks distorting decisions by investors operating in international (and cross-sectoral) investment markets.

### ***Conclusions on treatment of technical issues***

Although the PPP Agreements appear to approach some of these issues differently from traditional utility regulation, the underlying concepts are in fact comparable. So I will need to ensure that any differences in approach are identified, explained and justified. The work programme and procedures which I am developing are designed to do this.

### **Amending ‘contracts’**

In this final section, I consider three issues:

- the merits of a contract compared with a licence;
- the role of Arbiter in comparison with that of an arbitrator; and
- the role of guidance to the Arbiter.

### ***Contract or licence?***

Reference is often made to the existence of a ‘regulatory contract’ for companies with a licence, which is reviewed and reset by the regulator generally every five years. This description suggests a basic similarity between a commercial contract and a licence. Both impose obligations on the supplier, in terms of services to be provided, and establish the price to be paid, although the circumstances of the initial award of a licence or contract are generally very different. But is the analogy a reasonable one? And given the similarities and differences, are there reasons to prefer a licence or a contract as the basis for the provision of infrastructure services in terms of subsequent enforcement and modification?

Two differences which may be important are the identity of the counter-party and the procedure for modification.

A practical argument for obligations to be set out in licences enforced by an independent regulator in some industries is that it would be impracticable to contract with individual consumers. This impracticality is not, however, because of administrative complexity; supply competition in energy markets has required these issues to be addressed and resolved. Rather the problem is that individual consumers cannot determine their own standards of service: interruptions to supply because of network problems will generally affect groups of consumers, and greater resilience can only be achieved by individuals investing in back-up supplies. So to avoid problems of free-riding, standards for networks (as opposed for example to customer service) need to be established centrally<sup>29</sup>.

This does not, of course, of itself make the case for the regulator to be the counter-party to the regulatory contract. In some sectors, most obviously rail and energy, many aspects of service delivery are set out in bilateral commercial contracts which are

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<sup>28</sup> Bolt (2003).

<sup>29</sup> Central establishment of standards could however be through a market mechanism (as with electricity generation), rather than through imposition of standards. The key point is that individual consumers cannot chose their *own* preferred level of network security.

consistent with the high level price controls and service standards in licences. Enforcement of contractual obligations is then through normal dispute resolution mechanisms and need not involve the regulator. Review and change provisions at the behest of the regulator can be written into those contracts. However, the distinction between what goes in a licence and what is more properly part of the contractual matrix is not always clear, which can lead to disagreement between the company, customers and the regulator<sup>30</sup>.

Clearly not all standards are set by the economic regulator. Many are set by other independent regulators such as the Environment Agency, Drinking Water Inspectorate or Health and Safety Executive. But in all current models for the regulated networks, price controls remain an issue decided by the regulator.

It is easy to see why it is important for an independent regulator to have such a role, given the need to provide assurance to the financial markets that the considerable funds invested in network industries will be appropriately remunerated. But even here, it is not necessary for the regulator to take a proactive role in a price review. If there is a single 'customer', as with LUL in respect of the Underground, then there are clear advantages in giving that customer a leading role in determining both the affordable level of charges and the mix of services it wishes to purchase. In those circumstances, both parties can have the right of appeal to an independent regulator or arbiter but also have the ability to frame the reference in a way which makes clear the points at issue, and the points which are agreed. It follows that the Arbiter cannot intervene if the parties are content with the position reached in negotiation.

There is no precise analogy to the position of LUL in other sectors. Even in respect of the national rail network, 'customers' include the Passenger Transport Executives and open access operators as well as the SRA. But harnessing the views of customers more directly – for example in the shape of the Gas Forum for Transco's shipper customers or in terms of the airlines using airports subject to price regulation by the Civil Aviation Authority – could help to remove some of the information asymmetries in the current regulator/regulated relationship, and thereby reinforce the role of the independent regulator.

A second apparent difference between contractual and licence models concerns the processes for modification of the 'contract'. This might be characterised as a distinction between the an approach based on legal procedures and one based on public law. On this view, a licence framework gives the regulator the ability to propose changes to the 'contract' at any time, subject to public interest tests established in the relevant statute – which effectively seek to maintain the basis of the 'economic deal' in terms of the legitimate expectations of the company<sup>31</sup> and its customers – and subject to appeal to the Competition Commission or to the courts through judicial review. By contrast, a contract establishes a defined commercial relationship which can be modified by the agreement of both parties, but where the role of the courts in the event of dispute is merely to determine the meaning of the contract, not to consider the intentions and expectations of the parties in entering into it.

However, this view of the law of contract is increasingly being challenged by practice, where courts have shown a willingness to consider more than the contract documentation. The development of concepts relating to unfair contract terms is one

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<sup>30</sup> For example, in the case of Transco's long term auctions of system entry capacity, the requirement for an auction and the reserve price provisions are in the licence; the detailed auction mechanisms are in the Network Code.

<sup>31</sup> Including, through the financing duty, the company's shareholders and lenders.

example. More generally, contracts can be seen as summarising commercial understandings rather than simply providing the basis for legal action if one or other party fails to meet its stated obligations<sup>32</sup>. Recourse to the courts can then be seen as evidence of a breakdown in the business relationship, given that most contractual disputes are resolved through alternative routes which are better able to take account of the evolving market conventions which underpin commercial relationships.

In part, this broader interpretation recognises the impossibility of creating complete contracts, particularly where the deliverables are complex and extend over a long period. There is undoubtedly value in trying to define the service to be provided at the outset, not least to ensure that the customer has properly thought about its requirements and to avoid the significant cost increases following specification changes during the contract. But the future is inherently uncertain, and while those drafting the contract may attempt to identify all possible outcomes, and define the allocation of risk between the parties in each, there will inevitably be gaps<sup>33</sup>.

Development of alternative dispute resolution mechanisms is in part a recognition that a fair resolution to a dispute needs to consider more than the words in the contract. In the case of the LUL PPP, recognition of the inevitable incompleteness of the contract and the need for independent resolution of disputes, particularly where either party exercises its rights in respect of the flexibilities in the contract, has gone beyond this and led to the creation of the statutory role of Arbiter.

So in terms of the basis for modifying the initial agreement to take account of changing external circumstances, the comparison between a licence and a contract is not as great as might at first sight appear – although the process is obviously different. Those who use the term ‘regulatory contract’ may well have recognised this. And the current debate about widening the appeal provisions to industry codes and allowing consumers some right of appeal all move in the direction of narrowing the gap.

It is also worth noting the views of the National Audit Office and Public Accounts Committee in relation to the need for effective change control processes in PFI contracts. For example, the PAC has noted that change control procedures had been triggered in more than half of the PFI contracts it considered in 2002, but there was a need to avoid change control procedures being ‘abused as a covert means for increasing the profit margins for contractors’<sup>34</sup>.

### ***Arbiter v Arbitrator***

Look in a dictionary, and you may well find that the definition of an arbiter includes being an arbitrator – and vice versa! Given that the PPP Agreements contain well developed dispute resolution procedures, including resort to adjudication and ultimately the courts, and that they draw a clear distinction between issues where the Arbiter decides disputes rather than an adjudicator, what are they key differences?

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<sup>32</sup> See Collins (1999) for an exposition, for example (page 165): ‘If the courts wish to do justice between the parties rather than referee the quality of the lawyers in devising comprehensive risk allocation, they should not attach such weight to the paperwork, but concentrate their energies on an investigation of the context, the market conventions, and the assumptions of the parties in framing their core deal.’

<sup>33</sup> This is particularly likely in respect of what have traditionally been termed ‘public services’, as evidenced by the many National Audit Office reports on contracts which have run into difficulty.

<sup>34</sup> PAC (2002).

A further search of the internet comes up with the following: 'the arbitrator's job is to decide disputed fact and decide disputed law then apply the decided fact to decided law'<sup>35</sup>, although there is clearly also a presumption that arbitrators will consider the norms and conventions within which a contract has been developed<sup>36</sup>.

The LUL PPP Agreements are notable in having two specific forms of dispute resolution – those issues coming to the Arbiter and those dealt with through normal contractual routes. In addition the Agreements create the role of a 'Partnership Director'<sup>37</sup>. So what are the distinguishing features of the Arbiter?

One key feature of the PPP Arbiter role is that it is created by statute with statutory duties rather than simply duties to the parties to the contract. The Act clearly envisages that it is a continuing role, with an ability to give guidance as well as directions, whereas an arbitrator or adjudicator will be appointed only when the parties have reached a specified point in dispute resolution procedures. A corollary of this continuing role is that the Arbiter will seek to establish the framework for dealing with issues, and put in place the necessary information flows to support his analysis<sup>38</sup>.

Given developments in arbitration provisions, there is perhaps less difference between the powers of the Arbiter and of an arbitrator in respect of investigations within the context of a particular reference. For example, the Arbitration Act 1986 provides that the tribunal can decide 'whether and to what extent the tribunal should itself take the initiative in ascertaining the facts and the law'<sup>39</sup>. However, the GLA Act gives the Arbiter similar statutory information-gathering powers to those of the economic regulators, which extend for example to the Infraco sub-contractors. An arbitrator does not have such statutory powers in any investigation he decided to carry out.

The nature of the issues referable to the Arbiter perhaps provides the best basis for distinguishing the roles. These issues, which cover both of costs of maintaining and renewing the network and the costs of the finance raised by the Infracos, clearly go to the heart of the economic deal. Some of the concepts will be difficult to define and assess in practice, and the relevant 'conventions' will need to draw on experience in both the regulated network industry sector and the PFI.

One obvious example is in the very definition of the Notional Infraco. The PPP Agreements do not attempt to define what is 'efficient and economic', and go no further than identifying some of the relevant features of Good Industry Practice. Although the guidance provides some further pointers, the Agreements recognise that it is impossible to provide a cookbook recipe that will produce **the** right answer if followed properly, not least given that the assessment is dynamic and needs to be relative to changes in the market<sup>40</sup>.

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<sup>35</sup> Bingham (2003).

<sup>36</sup> Collins (1999), p164.

<sup>37</sup> An individual appointed by LUL (in its capacity as a special shareholder in each Infraco) as a non-executive members of the Boards of all three Infracos. The Shareholder Agreement, which creates the role, notes for example that 'The parties wish the Company to have the benefit of an eligible person who is able, as an independent and non-executive director, to act in a public interest capacity for the good of the Company. ... The parties wish the Partnership Director to apply his independence and expertise in areas where there are or may be perceived to be conflicts of interest between the Company and the Special Shareholder and/or the Sponsors ...'

<sup>38</sup> My own proposed approach is set out in OPPPA (2003).

<sup>39</sup> Section 34(2)(g).

<sup>40</sup> The issues are similar to those considered by John Kay in his parable of the BT dress code, and the doomed attempt to define what is 'suitable business dress', Kay (1996).

For issues such as these, which go to the heart of the PPP deal, arbitration would be inadequate. It is no surprise that the GLA Act created an independent Arbiter as a public body, with statutory duties, whose functions focus on responding to references from the parties but with further powers which enable those references to be dealt with expeditiously and in accordance with best practice in public administration – as befits agreements involving costs in excess of £1 billion a year and affecting a key transport system in London.

### ***The role of Guidance***

Drawing this distinction between the role of the Arbiter and that of an arbitrator may appear to put the Arbiter's role close to that of a traditional economic regulator. Nevertheless, for all the reasons outlined earlier in this paper, it would be wrong to equate the Arbiter with a regulator. One particular difference worth further consideration is the existence of guidance to the Arbiter from the PPP Parties.

As explained above, the Arbiter cannot give guidance or directions unless asked to do so by one or both of the Parties to an Agreement. The Parties can set out the terms of reference<sup>41</sup>, and can also indicate matters which they do not wish the Arbiter to consider (but which may nonetheless need to be considered as matters ancillary or incidental to the matter referred). The approach they expect the Arbiter to take is also set out in guidance, which the Arbiter is under a statutory duty to take into account.

Guidance to a regulator is a feature of other sectors. But it is generally in the form of guidance from a Secretary of State on matters of general government policy<sup>42</sup>, rather than from the parties to a contract; and it is generally issued only after public consultation. The different nature and status of contractual guidance to the Arbiter has been seen by some as constraining the ability of the Arbiter to consider issues relevant to longer term economy and efficiency<sup>43</sup>.

It is clearly right – and consistent with the principles of incentive regulation and minimisation of regulatory risk developed in other sectors – that the terms of the initial deal are protected until a Periodic Review<sup>44</sup>. It is also right that Infracos should have the ability to subcontract major projects beyond the Periodic Review period (7½ years in the case of the PPP) where this can be expected to deliver efficient and economic outcomes and is consistent with Good Industry Practice – and of course delivers the requirements of the main contract. Given these provisions, the guidance from the parties to the Arbiter on these issues does not create unreasonable expectations of the approach that should be taken.

Guidance which sets out the intentions and expectations of the parties is, in any case, an important part of understanding the economic basis of the deal. While the statute gives the Arbiter the ability to give directions which go outside the specific terms of a reference, this can only be done where achievement of the statutory duty means that it would not be possible or appropriate to do otherwise. Seeing the guidance as

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<sup>41</sup> Which in the case of directions must be consistent with the issues identified in the Agreement as ones which can be referred to the Arbiter.

<sup>42</sup> Such as guidance on social and environmental issues to the Gas and Electricity Markets Authority.

<sup>43</sup> See for example Glaister (2003).

<sup>44</sup> Given that the Arbiter had no part in the specification and negotiation of the PPP Agreements, or in the selection of the winning bids, it is clearly for LUL alone to justify the terms of the Agreements. The National Audit Office has already carried out one study of the contract award process, and is currently undertaking a second review.

rebuttable, but requiring such rebuttal to be fully argued and justified, and with decisions only taken after full and effective consultation with affected parties, is consistent both with minimising regulatory risk and achieving best practice in public administration.

### ***Conclusions on mechanisms for amending contracts***

In considering whether regulation and contracts are substitutes or complements, Jon Stern has concluded that 'the existence of a regulatory agency allows for better and simpler contracts, which are easier to monitor, enforce and revise. This is what would be expected from the theory of incomplete contracts'<sup>45</sup>. This is indeed what the PPP provides; and it does so in a way which avoids some of the uncertainties seen in other sectors where licences and contracts exist in parallel.

Some other aspects of the arrangements, such as giving the customer a greater role (and responsibility) in negotiating changes to the 'contract', with recourse to an independent arbiter only when necessary, also set the PPP apart. The reactive nature of the Arbiter's role certainly makes it more difficult to plan ahead with any certainty. But taken overall, the arrangements in the PPP would seem not just appropriate for the Underground PPP itself, but may offer a possible model for developments in other regulatory regimes and in PFI projects<sup>46</sup> where the absence of an independent 'appeal' body on the lines of the PPP Arbiter may .

### **Some tentative overall conclusions**

I have only been able to sketch in this lecture some of the similarities and differences between the LUL PPP Agreements and 'traditional' utility models and PFI contracts, and to outline some of the issues to be considered in assessing their strengths and weaknesses. There is much material here for further consideration and analysis – and in any case it is too early to draw on much practical experience of the PPP.

When I took on the role of Arbiter, some people suggested that it was an impossible one – and certainly in their view more difficult than that of a 'traditional' regulator. My view is rather different: difficult, yes; challenging, yes; but not impossible. Apart from the technical challenges, and the need to take forward a broad work programme with only six permanent staff, one of the key challenges will be to develop trust and credibility, while maintaining independence. One measure of success will be if the parties can resolve differences without recourse to me – not because (as is sometimes suggested with the Competition Commission) that appeal is costly and unpredictable, but because the framework is clear and transparent, and uses information and analysis which they themselves can carry out and share.

So, taking an overall view, I am optimistic about the prospects for the PPP and for the role of Arbiter. In particular, I believe that:

- the structure of the PPP arrangements seem more robust than those for the national rail network;
- differences in the treatment of 'technical' issues need to be considered further across the network and PFI sectors if investors are to face a level playing field in choosing between investment in PPP/PFI and regulated networks, but this can be achieved;

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<sup>45</sup> Stern (2003).

<sup>46</sup> The Public Accounts Committee has noted the risk that contractors may 'seek to increase their profit margins through variations and claims for additional work', PAC (2002).

- the arrangements for modifying contracts offer some useful alternatives to licence approaches which could help to clarify the appropriate boundary between the role of an independent re-setter of prices and those determining the services to be provided; and
- the model of Periodic Reviews with an independent Arbiter could usefully be considered in other PFI/PPP deals.

The London Underground PPP therefore sits between the two current models, and has tried to learn from the experiences with both. So might this be the start of a new chapter in the history of infrastructure funding and 'regulation'?

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## Annex 1

### The Infracos

Tube Lines (Holdings) Limited is a company with three equal shareholders:

<i>Shareholder</i>	<i>Parent Company</i>
JNP Ventures Limited	a wholly owned subsidiary of Amey Ventures Limited (“Amey”) and ultimately in the group of Grupo Ferrovial S.A, a company listed on the Madrid Stock Exchange
UIC Transport (JNP) Limited	a wholly owned subsidiary of UIC Transport (JNP) LLC and ultimately in the group of Bechtel Enterprise Holdings, Inc (“Bechtel”), a privately owned company
Jarvis JNP Limited	a wholly owned subsidiary of Jarvis plc (“Jarvis”), a company listed on the London Stock Exchange

Metronet BCV (Holdings) Limited and Metronet SSL (Holdings) Limited are companies with five equal shareholders:

<i>Shareholder</i>	<i>Parent Company</i>
Atkins Metro Limited	a wholly owned subsidiary of WS Atkins plc (“Atkins”) a company listed on the London Stock Exchange
Balfour Beatty Infrastructure Investments Limited	a wholly owned subsidiary of Balfour Beatty plc (“Balfour Beatty”) a company listed on the London Stock Exchange
Bombardier Transportation (Holdings) UK Limited	an indirect wholly owned subsidiary of Bombardier Inc (“Bombardier”) a company listed on the Toronto Stock Exchange
SEEBOARD Metro Holdings Limited	a wholly owned subsidiary of SEEBOARD Asset Management Limited, itself a wholly owned subsidiary of EdF Energy plc (“EdF”) and ultimately in the group of Electricité de France (which is wholly owned by the French State)
Thames Water plc (“Thames Water”)	a subsidiary of RWE AG (“RWE”) a company listed on the Frankfurt Stock Exchange