



**The PPP Arbiter**

**OPPPA close out report**

**23 November 2010**

## Key dates

31 December 2002	Tube Lines PPP Agreement commences; Chris Bolt appointed as PPP Arbiter
4 April 2003	Metronet BCV and SSL PPP Agreements commence
June 2003	Arbiter appointments key staff to his Office
9 September 2003	Arbiter consults on policy and procedures
6 April 2005	Arbiter informed that Metronet and London Underground had agreed not to seek Annual Report from Arbiter in 2005
8 November 2006	Guidance on investment which straddles a Periodic Review issued, following reference from Tube Lines
16 November 2006	Metronet Annual Report 2006 published, finding that neither Infracore had operated in an overall efficient and economic manner and in accordance with Good Industry Practice since transfer
13 March 2007	Guidance on treatment of investment at an Extraordinary Review published, following reference by Metronet
28 June 2007	Metronet BCV Extraordinary Review reference received
16 July 2007	Draft directions on interim ISC for Metronet BCV published
18 July 2007	Metronet BCV and SSL go into administration
31 October 2007	Extraordinary Review reference withdrawn by Metronet BCV
27 May 2008	Metronet BCV and SSL transferred to TfL ownership
9 September 2008	Guidance on initial ranges of Tube Lines costs in second Review Period published, following reference from London Underground
8 December 2008	London Underground starts Tube Lines Periodic Review process by issuing its Restated Terms
23 September 2009	Tube Lines Periodic Review referred to the Arbiter for direction
10 March 2010	Direction on Tube Lines costs in RP2 and related matters published
27 April 2010	Direction on financing impossibility published
7 May 2010	Decision of Tube Lines shareholders to sell company to TfL announced
27 June 2010	Tube Lines sale to TfL completed
15 October 2010	Office of the PPP Arbiter closes

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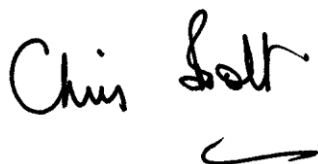
## Foreword by PPP Arbiter

The London Underground PPP Agreements, which commenced for Tube Lines in December 2002 and for Metronet in April 2003, were intended to run for 30 years. In the event, none of the three agreements survived their first reviews. First, Metronet BCV and SSL went into administration in 2007, following my decision not to award Metronet BCV payment for the additional costs of some £1 billion it had sought at an Extraordinary Review. Then the shareholders of Tube Lines agreed to sell their shares to TfL days before the second 7½ year Review Period was due to start on 1 July 2010, leaving the Periodic Review process incomplete.

Although the three PPP Agreements remain in place, they have been modified so that there are no matters which can be referred to me for directions. Also, the Parties to the Agreements (now all part of the TfL 'family') have agreed that they will not seek guidance from me or my Office, and that they will not ask the Secretary of State to appoint another Arbiter when my appointment expires. So while the statutory functions and duties of the Arbiter remain in place, in practice there is no prospect of the Arbiter being asked to exercise those functions. In these circumstances, the Office of the PPP Arbiter closed on 15 October.

It is unlikely that a PPP quite like this will emerge in future: the House of Lord Economic Affairs Committee has, for example, concluded in its investigation into private finance projects that "the failure of the London Underground Metronet PPP gave private finance projects in general a bad name." However, much of the work my Office undertook to assess the efficiency of the Infracos will be needed if the Mayor is to be assured of value for money. Indeed, the recent CSR settlement is underpinned by the Mayor's agreement to give the Independent Investment Programme Advisory Group a remit which picks up my work on benchmarking.

The purpose of this report is therefore two-fold: to record some of my key actions and decisions during the life of the Office, and to set out some of the lessons learnt from the approach my Office and I have adopted in the hope that these may be of use to IIPAG and others looking at the experience of the London Underground PPP.

A handwritten signature in black ink that reads "Chris Salt". Below the signature is a simple horizontal arrow pointing to the right.

PPP Arbiter

23 November 2010

## 1 Introduction and summary

1.1 This chapter sets out:

- the reasons for preparing this report;
- summarises the main lessons learned; and
- outlines the structure of the remainder of the document.

### Reasons for preparing this report

1.2 On 7 May 2010, the Arbiter was advised that Transport for London (TfL) was intending to purchase the only remaining Infracore; Tube Lines. The sale process was completed at the end of June, before the start of the second 7½ year Review Period on 1 July 2010. The work my Office and I were undertaking on the Periodic Review was therefore suspended, and final directions were not issued.

1.3 Although this does not affect the statutory role of Arbiter and the PPP Agreements remain in place, the Parties to the PPP Agreements (now all owned by TfL) have agreed changes which have the effect that no further references will be made to the Arbiter. TfL has also made clear its view that the Arbiter's further powers, which are available to use on matters preparatory to a reference, fall away. In particular, TfL and the Mayor have rejected the view expressed by both the House of Commons Transport Select Committee and the GLA Transport Committee that the role of the Arbiter should be retained and extended to report on the performance of London Underground in delivering the activities previously provided by Metronet and Tube Lines under the PPP.

1.4 The Arbiter's Office has therefore been wound up, although the role of Arbiter will continue until Chris Bolt's term of office expires on 30 June 2011 (unless it is terminated by agreement prior to this date).<sup>1</sup>

1.5 Against this background, the reasons for preparing this report are to provide a brief history of the work undertaken by the Office and to record some of the lessons learned. This will, hopefully, provide a reference document and information for future bodies undertaking similar work. It raises a number of issues that might be considered by future policy makers when establishing PPPs or statutory bodies similar to the Arbiter.

### Main lessons learned

1.6 The main lessons learned, covering both the operation of the Office and of the PPP Agreements are as follows:

- Before setting up a new role such as the PPP Arbiter, the status of the role and of employees needs to be clear (paragraph 3.6). There were also important omissions in the Arbiter's statutory information powers which were fortunately identified in time to be rectified (paragraph 4.6).

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<sup>1</sup> The Secretary of State has the power to give notice to the Arbiter only if there are no designated PPP Agreements in place.

- In the context of the PPP, the role of Arbiter would have been more effective had he had the power to initiate value for money studies (paragraph 3.15).
- A contractual structure was less flexible for a complex operation such as London Underground infrastructure than a licence structure; this was reinforced by problems in interpreting contract drafting (paragraph 3.17).
- The overlap between the Arbiter's role and normal contract dispute resolution should have been avoided (paragraph 3.20).
- The contract drafting reduced incentives on Infracos to invest in one period to reduce costs in future periods (paragraph 3.27).
- London Underground's standards appear to be more onerous than those for other metros, with an impact on costs (paragraph 3.32).
- Before setting up arrangements such as the PPP, the specification of monitoring information should be agreed (paragraphs 4.8, 4.11). Consideration should also be given at the outset to the appropriate processes for providing and verifying data (paragraph 4.15ff).
- Assessment of efficiency requires effective international benchmarking (paragraph 5.7). Given that such exercises are time consuming, and require commitment from those involved, it is important to establish them early and maintain them to provide time series data (paragraph 5.12ff).
- Where contracts are being modified, it is important that changes are adequately documented (paragraph 6.17).
- The procedures in the PPP Agreement for Reviews were less flexible and more burdensome than in sectors where price limits are set under the terms of licence conditions (paragraph 6.22).

### **Structure of report**

1.7 The remainder of this report is structured as follows:

- chapter 2 sets out a brief history of the activities of the Office;
- chapter 3-6 then set out some of the lessons learnt, covering: the PPP and the role of the Arbiter; monitoring; benchmarking; and handling references.

## **2 A brief history of the Office of the PPP Arbiter**

2.1 This chapter covers:

- the background to the creation of the role of PPP Arbiter;
- the Arbiter's functions and duties;
- appointment of the Arbiter;
- organisation and approach; and
- key activities.

### **Background to the creation of the role of PPP Arbiter**

2.2 In 1998, the last Labour Government announced that management and development of the London Underground assets and infrastructure would be transferred to the private sector under a long term PPP arrangement. The statutory provisions to allow this were included in the Greater London Authority Act 1999 (the GLA Act).<sup>2</sup> That Act also created the role of the PPP Arbiter to provide guidance and directions on the contract at the request of the Parties.

2.3 The PPP deal took five years to transact partly due to the scale and complexity of the arrangements, involving both restructuring of London Underground and contract drafting. Progress was also slowed by a number of legal challenges brought by the then Mayor of London, Ken Livingstone. The three PPP Agreements were finally signed on 30 December 2002 (Tube Lines) and 4 April 2003 (Metronet BCV and SSL)

### **Functions and duties of the Arbiter**

2.4 The Greater London Authority Act 1999 (GLA Act) established the role of PPP Arbiter, and set out his functions and duties. The Arbiter was established as a corporation sole, in others words an individual whose decisions and actions are made in the name of the Arbiter rather than a named person, thereby providing continuity of decision-making.

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

- to give directions on matters specified in the PPP Agreements, when referred to him by one of the Parties to a PPP Agreement; and
- 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.

2.6 The Arbiter's functions can therefore only be exercised following a request by one of the Parties. However, he has a number of further powers to prepare for possible references, even when a reference has not been made.

2.7 In giving guidance or directions, the PPP Arbiter is under a statutory duty to act in the way he considers best calculated to achieve four objectives:

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<sup>2</sup> At <http://www.legislation.gov.uk/ukpga/1999/29/contents>.

- 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, and taking into account matters specified in the 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.

The Arbiter is also under a duty to take account of any factors which are notified to him by both Parties to an Agreement, or are specified in the relevant PPP Agreement, as ones to which he must have regard.

### **Appointment of the Arbiter**

- 2.8 Following an open competition, Chris Bolt was selected as the first PPP Arbiter. His appointment was announced on 4 December 2002.<sup>3</sup> It formally commenced on 31 December 2002, the date that the Tube Lines agreement was signed, although he started the process of establishing his role at the beginning of December 2002.
- 2.9 The original term of the appointment was four years, but this has since been extended twice, first to 30 December 2010<sup>4</sup> and then, in October 2009, for a further six months to 30 June 2011. The reason for the first extension was to ensure continuity through the first Periodic Review of the PPP Agreements, expected to be completed in 2010; the reason for the second was to avoid a potential conflict between the timing of the recruitment process for a successor and the 2010 general election.

### **Organisation and approach**

- 2.10 Although some consideration had been given to the functions of the Arbiter being undertaken by the then Office of the Rail Regulator (ORR)<sup>5</sup>, in the event the only provision in the legislation was that if the Arbiter and Rail Regulator were the same person, staff in the two offices could be used interchangeably. Although Chris Bolt was chairman of ORR from July 2004 to July 2009, and the offices co-located during this period, all use by the Arbiter of ORR staff and services was in the event on a contractual basis.

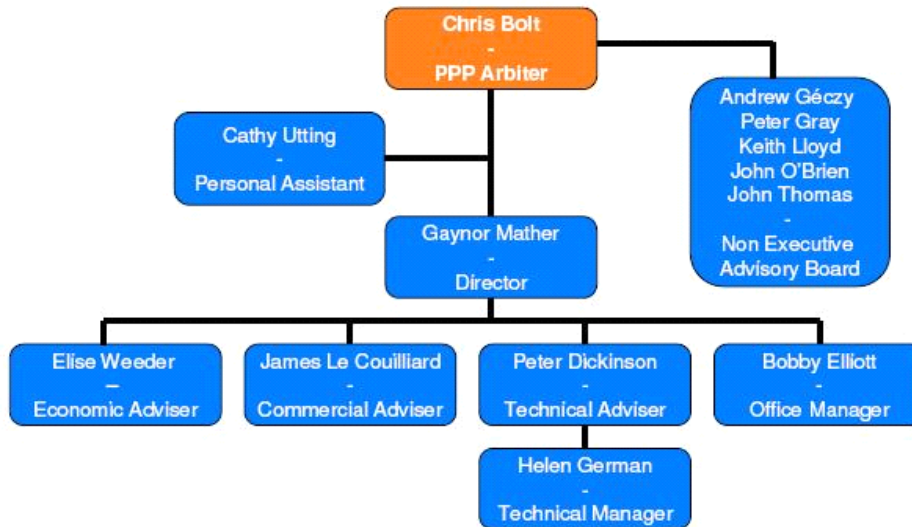
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<sup>3</sup> <http://www.wired-gov.net/wg/wg-news-1.nsf/0/7C26E9D1320A7A7E802572AB004B6D08?OpenDocument>.

<sup>4</sup> <http://www.wired-gov.net/wg/wg-news-1.nsf/0/3883188055DFA340802572AB004BD0E0?OpenDocument>.

<sup>5</sup> Now the Office of Rail Regulation.

- 2.11 As part of the recruitment process, Chris Bolt indicated to DfT his intention, if appointed, to establish a small office headed by a Director supported by experienced advisory staff and administrative support staff.
- 2.12 The structure of the Office was developed by Chris Bolt following discussion with DfT. Given that the only support available to him initially was a temporary PA, the recruitment process was managed by an external firm of head-hunters. Initially, the Office comprised seven staff, including a Legal Adviser. This post was abolished following the development of the Arbiter's Procedural Framework, and legal advice obtained initially from ORR and then from an external legal firm. A new post of Economic Adviser was created in 2007 in preparation for the Periodic Review
- 2.13 The Director and Commercial Adviser appointed in 2003 remained in post throughout the existence of the Office; other posts have seen some limited turnover.
- 2.14 The main functions of the Office, headed by the Director, were to advise the Arbiter on his directions and guidance and to undertake work on benchmarking and other aspects of asset management to enable that advice be given in a timely and authoritative way. The Office also prepared directions and guidance, instructed external advisers, monitored performance of the PPP Agreements and commissioned research on relevant and emerging issues.
- 2.15 Although the role of Arbiter was established at the time that individual regulators in other sectors were being replaced by boards, no consideration seems to have been given to a Board or Commission structure. Consistent with his view of best practice in corporate governance, as it applied to this role, Chris Bolt established an Advisory Board to assist his decision making. He initially appointed four non-executives, with a background in the rail industry, contract law and private finance contracts, corporate finance and regulated businesses. The Director was also a full member of the Advisory Board, with other staff members attending by invitation. The initial appointment process was undertaken by head-hunters with experience of appointments to public sector boards.
- 2.16 Two new non-executives have been appointed since 2003: one replaced a member who wished to stand down at the end of his initial appointment; the other was an ORR executive added to bring broader regulatory experience and to help identify opportunities for sharing expertise and analysis in undertaking reviews.
- 2.17 The Board, excluding the Director, also sat as an Audit Committee and a Remuneration Committee.
- 2.18 The structure of the Office at closure is set out below:



- 2.19 The Office structure established by Chris Bolt was intentionally small because the Arbitrer's workload was expected to be variable and unpredictable. For the first two years, no references were received but considerable work was undertaken developing the Arbitrer's approach to different types of reference, putting in place an information returns process for the PPP Parties and initiating a programme of work on benchmarking and assessment of asset management performance.
- 2.20 In September 2003, the Arbitrer consulted on the approach he should take to his role.<sup>6</sup> The consultation process highlighted issues about the appropriate approach for the Arbitrer to adopt. Although there was general recognition that the role was different from that of a regulator, there were differences of view on whether the Arbitrer should be reactive or proactive in preparing for references. Two particular issues were:
- the extent of any work to be undertaken in preparation for a reference, for example to develop a benchmarking framework; and
  - whether bilateral dialogue with the Parties would prejudice the Arbitrer's independence and impartiality.
- 2.21 Chris Bolt's view was that preparatory work was essential if he was to exercise his functions in a robust and timely way. He also considered that bilateral meetings would be helpful in understanding the issues concerning the Parties, and help in preparing for possible references. By clearly distinguishing between such dialogue and the relatively formal process associated with a review, he considered that there would be no risk of bias.
- 2.22 Following the consultation, the Arbitrer adopted the following aim for his work, and that of his Office:

<sup>6</sup> The PPP Arbitrer: Role, approach and procedures - An initial consultation paper, 9 September 2003, at [http://www.ppparbitrer.org.uk/files/uploads/e\\_informationProvision/2006228103922\\_An%20Initial%20Consultation%20Paper%20-%20Combined.pdf](http://www.ppparbitrer.org.uk/files/uploads/e_informationProvision/2006228103922_An%20Initial%20Consultation%20Paper%20-%20Combined.pdf).

“The aim of the PPP Arbiter and his Office is to give sound and timely guidance and directions on relevant aspects of the PPP Agreements when this is requested, and to work constructively with the Parties to the PPP Agreements in support of their key objective of providing to the public a modern and reliable metro service in a safe, efficient and economic manner.

We seek to achieve this by:

- working within a clear, transparent and consistent framework;
- giving reasoned guidance and directions which are based on well developed analysis shared with the Parties and procedures which achieve predictability in process and outcome;
- establishing effective dialogue with the PPP Parties and other stakeholders to facilitate timely response to requests for guidance or direction, while maintaining our independence; and
- operating to high standards of accountability in all our actions.”<sup>7</sup>

2.23 The aim and objectives have formed the basis of the Office’s work throughout its existence. They have in particular provided the basis both for business planning and objectives for individual members of staff.

### **Key activities**

2.24 In order to respond to references expeditiously, the Arbiter had to ensure that he and his team developed and maintained a good understanding of the approach taken by the Infracos to delivering contractual obligations, the work they were completing, its costs and the performance levels being delivered.

2.25 To this end a process of collecting routine returns from the Parties was established.<sup>8</sup> Routine meetings were also set up between the Arbiter and his team and key personnel in each of the Infracos and London Underground.

2.26 In the light of experience with the Metronet Extraordinary Review, and problems that had arisen in monitoring performance against the expectations at Transfer, the Arbiter established a standard data breakdown structure (DBS) and agreed with the Parties that this should be incorporated into the Annual Asset Management Plans which the Infracos were required to submit to London Underground.. Production of data in this format has been routinely reviewed by independent Reporters appointed by the Arbiter which are tasked with checking the numerical accuracy of the data, its sourcing and the assumptions that underpin it.

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<sup>7</sup> The PPP Arbiter: Role, approach and procedures - A policy statement, 19 January 2004, at [http://www.ppparbiter.org.uk/files/uploads/g\\_proceduralFrameWork/200621015957\\_The%20PPP%20Arbiter;%20Role,%20Approach,%20Procedures%20-%20Policy%20Statement%20\(19\\_01\\_04\)%20DM6577v1.PDF](http://www.ppparbiter.org.uk/files/uploads/g_proceduralFrameWork/200621015957_The%20PPP%20Arbiter;%20Role,%20Approach,%20Procedures%20-%20Policy%20Statement%20(19_01_04)%20DM6577v1.PDF).

<sup>8</sup> Routine provision of information to the PPP Arbiter: Initial requirements, 19 January 2004, at [http://www.ppparbiter.org.uk/files/uploads/g\\_proceduralFrameWork/200621015756\\_Provision%20of%20Information%20to%20the%20Arbiter%20-%20Initial%20Requirements%20\(19\\_01\\_04\)%20DM6520v1.PDF](http://www.ppparbiter.org.uk/files/uploads/g_proceduralFrameWork/200621015756_Provision%20of%20Information%20to%20the%20Arbiter%20-%20Initial%20Requirements%20(19_01_04)%20DM6520v1.PDF).

- 2.27 Issues arising from the need for effective monitoring are considered further in chapter 4 of this document.
- 2.28 In addition to collecting data prepared by the Parties it was clear, and indeed the PPP Agreement anticipated, that wider benchmarking of Infraco performance would be required. The Parties themselves established a protocol for comparing Infraco performance but the Arbiter considered the scope to be insufficient for his purposes. As a result he undertook a number of additional benchmarking exercises aimed at setting the Infracos in the context of their peers around the world. Lessons from this benchmarking work are set out in chapter 5.
- 2.29 Under the terms of the Metronet PPP Agreements, the Arbiter was expected to provide an annual report on performance (which in statutory terms was guidance). The first such report was to be for the period from Transfer to 31 March 2005.<sup>9</sup> In the event, Metronet and London Underground agreed that a report should not be prepared in 2005, and the expected reference was not made. The circumstances surrounding this were set out in evidence from the Arbiter to the House of Commons Select Committee on Transport when it investigated the PPP in 2007.<sup>10</sup> In that evidence, the Arbiter argued that, had he been asked to prepare the 2005 report, the scale of the problems at Metronet would have been identified sooner, and either its subsequent administration avoided or the consequences of administration significantly reduced.
- 2.30 In May 2006, the Arbiter received his first references: the first full annual Metronet report and a reference from Tube Lines related to the treatment of investments which straddled the 7½ year Periodic Reviews established by the PPP Agreement.
- 2.31 All references have been managed in accordance with the Procedural Framework that the Arbiter created and first published in 2004.<sup>11</sup> This Procedural Framework has been supported by more detailed Procedural Approach documents, which have been revised in the light of experience. The Arbiter consulted with the Parties on his proposed approach before publishing these documents.
- 2.32 Over the period from 2006 to 2009, the Arbiter received the following six references:

Date	Reference
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<sup>9</sup> The PPP Agreement refers to the first report being prepared after the first full contract year. Had the Metronet Agreements been signed before 31 March 2003, as originally expected, the first such report would therefore have covered the period to 31 March 2004. The implications of this delay are considered further in chapter 3.

<sup>10</sup> See in particular the Arbiter's supplementary written evidence at <http://www.publications.parliament.uk/pa/cm200708/cmselect/cmtran/45/45we04.htm>.

<sup>11</sup> Arbiter's Procedural Framework for use in the giving of Directions and Guidance under the Greater London Authority Act 1999 and PPP Agreements, 16 July 2004, at [http://www.ppparbiter.org.uk/files/uploads/g\\_proceduralFrameWork/2006314134117\\_The%20PP%20Arbiter's%20Procedural%20Framework%20\(16\\_07\\_04\)%20DM3307v1.PDF](http://www.ppparbiter.org.uk/files/uploads/g_proceduralFrameWork/2006314134117_The%20PP%20Arbiter's%20Procedural%20Framework%20(16_07_04)%20DM3307v1.PDF).

10 May 2006	Annual Metronet Report 2006 – reference for guidance by Metronet BCV and SSL
10 May 2006	Investment which straddles the Periodic Review – reference for guidance by Tube Lines
13 November 2006	Treatment of investment at Extraordinary Review – reference for guidance by Metronet BCV and SSL
28 June 2007	Extraordinary Review – reference for direction by Metronet BCV
14 April 2008	Initial Range of future costs for Tube Lines – reference for guidance by London Underground
23 September 2009	Periodic Review – reference for direction by London Underground

- 2.33 The work of the Office has therefore reflected two broad phases: the first, from inception to mid 2006, focused on developing procedures and analytical approaches; while the second, from mid 2006 to mid 2010, focused on responding to references.
- 2.34 Chapter 6 considers in more detail issues arising from the handling of references.

### **Closure of the Office**

- 2.35 The functions of the Arbiter are only exercised in response to, or in reasonable anticipation of, references being made. This means that he has no power to initiate investigations into value for money where no references are in prospect. Following the acquisition of Tube Lines by TfL in June 2010, the three PPP Agreements have been modified so that there are no matters which can be referred to the Arbiter for direction<sup>12</sup>. The Parties (now all under TfL ownership) also agreed not to refer any matters to the Arbiter for guidance.
- 2.36 In these circumstances, given that the powers – and the need to employ staff – to prepare for references had effectively disappeared, Chris Bolt concluded that he had no alternative but to close the Office. Records have been transferred to the Department for Transport, with provisions for the Independent Investment Advisory Group<sup>13</sup> to access information relating to the Arbiter's benchmarking work.
- 2.37 The Office closed on 15 October 2010 and those staff who had not found other employment were made redundant.

<sup>12</sup> Under the terms of the GLA Act, only matters which are specified in the PPP Agreements can be referred for direction.

<sup>13</sup> This group has been set up by the Mayor to review value for money across the whole of TfL's non-operational activities, ie including all infrastructure work carried out by or for London Underground. (See Spending Review 2010: TfL funding agreement, 20 October 2010, at <http://www.dft.gov.uk/press/letters/tlffunding/pdf/sosletter.pdf>.)

### **3 The PPP and the role of the Arbiter**

#### **The structure of the PPP Agreements**

- 3.1 The PPP Agreements covered a period of 30 years with the expectation that contracts would then be re-tendered or that responsibilities for infrastructure would be returned to the public sector. A key issue in developing the contractual arrangements was the fact that it would not be possible to specify the requirements or price them for the full contract term.
- 3.2 With this in mind the concept of a Periodic Review process, similar to price reviews in the other regulated networks, was included in the Agreements. Reflecting a view that it would be appropriate to have a longer period between reviews than the five years which generally applied elsewhere, these reviews were to be every 7½ years. At these reviews, London Underground would have an opportunity to restate its requirements and agree revised pricing with the Infracos. In the event that agreement was not possible, the PPP Agreements provided that matters relating to costs and/or the Infrastructure Service Charge (ISC) to be paid could be referred to the Arbiter for direction. Under the terms of the GLA Act, such directions could include contract modifications which were binding on the Parties unless they agreed to set the directions aside.
- 3.3 It was therefore anticipated that the Parties would run these negotiations themselves initially but that in a commercial environment it was unlikely that the Parties would be able to reach agreement on all aspects of the review. This was particularly likely given that the concepts of efficiency and economy which form the basis of repricing are not further defined in the PPP Agreements and require both analysis and the exercise of judgement.

#### **Issues arising from statutory status of the Arbiter**

- 3.4 All decisions are reserved to the Arbiter, although he has the power to delegate decisions to members of his staff. Because the Arbiter, once appointed by the Secretary of State, can only be dismissed for impropriety or misbehaviour, or for an unreasonable delay in exercising functions, the Arbiter acts independent of both Government and of the Parties to the PPP Agreements.
- 3.5 There are two areas where uncertainty about the status of the Arbiter has created some difficulty.
- 3.6 First, it was not clear whether the Arbiter and his Office were part of central Government for the purposes of access, for example, to contractual arrangements developed by OGC, OPG banking etc. However, after discussion with DfT lawyers, it was agreed that the Office could be regarded as part of central Government for these purposes. Also, although it is clear that the Arbiter's staff are not civil servants, it was agreed that they could be eligible for membership of the PCS, although this was not formalised until sometime after their appointment. It would have been helpful for these matters to have been clarified by DfT in establishing the role of the Arbiter in legislation.

3.7 Secondly, it was unclear whether the Arbiter was covered by the provisions of the Arbitration Act or not. During the passage of the Bill, the Government rejected an amendment which would have clarified that the Arbiter was not an arbitrator for the purposes of the Arbitration Act. Although Chris Bolt considered that his decisions were amenable to judicial review, there was some doubt about this given the possible application of the Arbitration Act.

### **Issues arising from the statutory and contractual structure**

- 3.8 The role of the Arbiter – neither regulator nor arbitrator – is a novel one. Even those close to the transaction initially had difficulty in accepting the statutory basis of the role. Arguments were made to the effect that the Arbiter was effectively a servant of the PPP Agreement, a view that could not be correct given the statutory provisions in the GLA Act. However, it was clear that the Arbiter had no unilateral power to change, or propose to change, provisions in the PPP Agreements. Even where he has made a direction on a matter within his remit, the Parties may, under the provisions of the GLA Act, jointly agree to set it aside.
- 3.9 Similarly, the Arbiter's second function of giving guidance was only exercised at the request of one (or both) of the Parties. Although he has discretion as to whether to give guidance when only one Party has requested it, the criteria which he established<sup>14</sup> meant that in the event he agreed to give guidance in all cases referred to him.
- 3.10 Although the power for the Arbiter to give guidance was widely drawn, there was some reluctance on the part of the Parties to use it. Thus, for example, London Underground could have sought guidance on matters relating to Metronet costs when Metronet delayed seeking an Extraordinary Review direction in the early part of 2007, but did not do so. But equally London Underground's decision to make the 'initial ranges' reference in 2008 was criticised by Tube Lines for delaying the formal Periodic Review process.
- 3.11 In giving directions or guidance, the Arbiter is under a statutory duty to 'act in the way he considers best calculated to achieve' four objectives. 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, and taking into account matters specified in the Agreement, a company which is

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<sup>14</sup> Set out first in Procedural approach to the receipt of an unanticipated request for Guidance, 16 July 2004, at [http://www.ppparbiter.org.uk/files/uploads/g\\_proceduralFrameWork/200631413405\\_PPP%20Arbiter's%20Procedural%20Approach%20to%20Unanticipated%20Guidance%20\(16\\_07\\_04\)%20DM6669v1.PDF](http://www.ppparbiter.org.uk/files/uploads/g_proceduralFrameWork/200631413405_PPP%20Arbiter's%20Procedural%20Approach%20to%20Unanticipated%20Guidance%20(16_07_04)%20DM6669v1.PDF).

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.
- 3.12 As with a number of the economic regulators, these objectives are not prioritised, and could conflict. The Arbiter envisaged dealing with this by setting out, in consulting on draft directions and guidance, how he had addressed any such conflicts.
- 3.13 In giving directions or guidance, the Arbiter is also under a duty to take account of any factors which are notified to him by both Parties, or are specified in the relevant PPP Agreement, as ones to which he must have regard. This created some uncertainty about the power of the Parties to exclude matters from a reference where, in the Arbiter's view, the agreed position was in conflict with his statutory duties.
- 3.14 The basis of the Arbiter's directions and guidance was an investigative process rather than an adjudicative one. So although his procedures were based on seeking submissions from both Parties to the relevant agreement, Chris Bolt considered that it was entirely within his remit to take an altogether different view from that put forward by either of the Parties.
- 3.15 Although the Arbiter has the power to consult on any matter in preparation for a reference, this does not give him the unilateral power to investigate matters where there is no reasonable prospect of a reference, or to modify contractual provisions unilaterally even if this would support delivery of his statutory duty. Chris Bolt has expressed the view<sup>15</sup> that the role of the Arbiter would have been more effective had he been able to initiate investigations even where the Parties had made it clear that no reference was in prospect, and that his inability to do so had exacerbated the consequences of failures by the two Metronet Infracos (as discussed further in chapter 6).

### **Issues arising from contract drafting**

- 3.16 In particular in preparing for and carrying out the Tube Lines Periodic Review, a number of contractual drafting issues were identified. In many cases, these resulted from last minute changes with cross-references etc not being properly followed through, or with slightly different terminology being used in different part of the contract.
- 3.17 In many cases, the correct interpretation was clear. However, although the Parties in many cases accepted those interpretations, there was a reluctance to change the contract to correct the drafting because of the cumbersome process for agreeing even minor changes. The contractual framework therefore resulted

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<sup>15</sup> For example in evidence to the Transport Select Committee and in his Beesley lecture Regulating a state owned company: can we create the right incentives?, 28 October 2010, at <http://www.chrisbolt.me.uk/resources/Regulating+a+state+owned+company.pdf>.

in a much less flexible regime than, for example, exists where obligations are contained in licences.<sup>16</sup>

- 3.18 Some of the matters of contractual interpretation were of much greater significance. For example, in the Tube Lines Periodic Review, there was a fundamental disagreement between the Parties on whether the requirement for the Arbiter to set ISC in accordance with the 'profile' specified by London Underground meant 'level' or 'shape over time'.
- 3.19 A further issue arising from contract drafting was that it was possible to have matters referred to both the Arbiter and for dispute resolution by an external adjudicator. This was a matter of some concern in the recent Tube Lines' Periodic Review, where matters such as the amount of access time available to Infracore were being separately considered by an adjudicator but fundamental to pricing the programme of work being reviewed by the Arbiter.
- 3.20 Having such overlapping procedures complicates matters and increases costs and uncertainty of the outcome unnecessarily. It would have been possible to specify in the contract that, once a reference had been made, all matters would be subsumed within that reference and dealt with by the Arbiter.

### **General observations on the PPP**

- 3.21 The PPP was intended to create a stable funding environment in which to implement a large scale and initially largely fixed upgrade programme across the network. It was also intended to provide incentives on the private sector partners to deliver those things which London Underground and its customers valued. So, for instance, the performance regime was directed at incentivising improved journey times, reflecting a valuation of travel time, and making the system more reliable and pleasant to use. Risk was to be transferred or retained by the partner best able to mitigate it
- 3.22 The first Review Period saw funding at a level beyond that routinely experienced for decades. In broad terms, the PPP Agreement envisaged major upgrades being completed by the end of the second Review Period, with funding in the third and fourth periods covering ongoing maintenance and renewal and financing costs.
- 3.23 Although it was underpinned by comfort letters and a ten year financial settlement for central government grant to TfL, the long term stability of funding always appeared to be in question.<sup>17</sup> There was an expectation, in particular from Government, that Periodic Review could be used as a means of reducing work volumes. While in principle this could be possible, the majority of the enhancement programme was always intended to be underway at the time of the

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<sup>16</sup> See for example Chris Bolt's CRI Occasional Lecture Regulating by contract and licence: the relationship between regulatory form and its effectiveness, 28 March 2007, at [http://www.ppparbiter.org.uk/files/uploads/f\\_articlesLectures/200741792822\\_CRI%20Occasional%20lecture.pdf](http://www.ppparbiter.org.uk/files/uploads/f_articlesLectures/200741792822_CRI%20Occasional%20lecture.pdf).

<sup>17</sup> The ten year settlement has, for example, been reduced to a five year one in the 2010 Comprehensive Spending Review.

first review and completed by the end of the second period .Stopping or slowing major capital works is always costly.

- 3.24 In the current environment the bulk of the upgrade programme now falls to London Underground to complete in a period of extreme funding uncertainty which is already affecting delivery. For example, the Piccadilly Line upgrade due to be completed in the second period has now been deferred beyond it.
- 3.25 A major success of the contract has however been the day to day performance regime. Although initially criticised for its complexity, it has in fact operated effectively throughout the last seven years. On the key routine measure of Availability performance has improved with delays reducing by around half since Transfer.
- 3.26 Tube Lines in particular has also had some significant success in reducing costs. Its progress towards the benchmark range is marked and consistent, and in contrast to the performance of BCV and SSL.<sup>18</sup> For both of these Infracos there has been a steady but significant decline in cost performance since they were taken back under public ownership.
- 3.27 One major problem with the structure of the PPP Agreements was the perceived lack of effective incentives for long term planning and investment. In the case of Metronet, Chris Bolt has argued<sup>19</sup> that the companies saw the contracts as effectively cost-plus, with a consequent weakening of incentives to innovate and improve efficiency. This was less an issue for Tube Lines, given in part the much higher level of cost increases that fell to shareholders to absorb within the first Review Period.<sup>20</sup> However, for all Infracos, the Periodic Review created a reluctance to invest in one period in order to lower costs in the next because the contract drafting implied that the all the benefits would accrue to London Underground after the review date. Despite this, the contract required Infracos to take decisions on a 'whole life' basis.
- 3.28 At Periodic Review this led to the Arbiter concluding, on the basis of comparison with good practice elsewhere, that Tube Lines should have done more in the first period to establish new ways of approaching work, such as additional mechanisation, which would lower future costs. Given its acquisition of Tube Lines, TfL will now be bearing the cost consequences of this.
- 3.29 A further key issue has been the relationship between the Infracos and London Underground. Almost immediately after transfer there were disagreements as to the level of transparency of programme and costs that was appropriate under the terms of the agreement, with London Underground seeking levels of

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<sup>18</sup> Final benchmarking reports, 14 October 2010, at [http://www.ppparbiter.org.uk/files/uploads/d\\_benchmarking/20101022104118\\_115678rkh%20Benchmarking%20Anonymised%20v01.pdf](http://www.ppparbiter.org.uk/files/uploads/d_benchmarking/20101022104118_115678rkh%20Benchmarking%20Anonymised%20v01.pdf).

<sup>19</sup> For example in evidence to the Transport Select Committee.

<sup>20</sup> For Tube Lines, this 'Materiality Threshold' was £200m; it was only £50m for the two Metronet Infracos

transparency that Infracos were unwilling to accommodate. This is discussed further in chapter 4.

- 3.30 Thereafter there were disagreements about the scope of work to be completed on stations. By seeking to reach agreement on scope before work commenced, Metronet experienced significant slippage in its stations programme, as well as cost increases. These issues had a major impact on the outcome of the Extraordinary Review in 2007. Tube Lines' approach, by contrast, was to maintain delivery of the programme and use the dispute resolution machinery in the PPP Agreement to reach a resolution of any disagreements with London Underground. As a consequence, it was able to deliver significant reductions in the unit costs of the programme within the first Review Period.
- 3.31 Another area of disagreement related to standards and the standards change process. The Infracos considered London Undergrounds standards change processes to be cumbersome and that early efforts to change standards had been frustrated by bureaucracy. London Underground on the other hand considered that the Infracos did not make sufficient efforts to justify the proposed changes and that many of the standards could be modified by the Infracos without London Underground approval.
- 3.32 London Underground's standards are significantly more onerous than those of international metros working in accordance with good industry practice. One example of this is the Jubilee Line upgrade project, which is late, has caused major passenger disruption due to closures and has costs substantially higher than efficient levels. It is clear that Tube Lines intended to procure signalling manufacturer's standard equipment and apply their technology. London Underground standards, originally developed for older technology, and its approach to the adoption of new technology meant that Tube Lines had to make very substantial changes to this equipment and its associated software and this undoubtedly contributed to the high cost of this and the Victoria Line upgrade project. Although, as part of the Periodic Review, the Arbiter concluded that Tube Lines should have managed this process more effectively, he also concluded that costs for future upgrades could be significantly reduced if more appropriate standards were adopted.

## 4 **Effective monitoring**

4.1 This chapter covers:

- the statutory basis for the Arbiter's collection of information;
- the routine returns process established by the Arbiter;
- issues arising from this process; and
- the role of the Reporter.; and

### **Provision of information (GLA Act section 233)**

4.2 The GLA Act gives the Arbiter power to seek from the Parties, their associates and any PPP related third party such information as he considers relevant to the proper discharge of his functions. Any failure to provide information can lead to enforcement action in the High Court.

4.3 In the event, in part no doubt because of the existence of the statutory powers (which mirror those of the economic regulators), the Arbiter has been able to obtain information from the Parties on a voluntary basis.

4.4 Any information provided to the Arbiter 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 Secretary of State, the Mayor, Transport for London or the Arbiter himself to carry out their functions under the GLA Act or to facilitate Ministers, the Mayor and other regulators to carry out statutory functions under other Acts such as the Railways Act.

4.5 One issue arising from this provision was that the Arbiter was, in principle, able to release to the Mayor and TfL information provided in confidence to him by an Infracore. Because he considered that the Act should not be used to obtain information where London Underground had no contractual right to it, and its provision could compromise the commercial basis of the relationship, he set out a procedure for a Party to make a formal request and for him to receive representations from the other Party concerned.

4.6 The provisions of the GLA Act were amended (in the Railways and Transport Safety Act 2003) to allow, for example, Ministers and the economic regulators to disclose information obtained under their statutory powers to the Arbiter. The omission of this provision from the GLA Act was a major lacuna in the Arbiter's powers, and has provided the basis for other regulators to share benchmarking information which has been of value to the Arbiter in handling references.

### **Routine returns**

4.7 Chris Bolt's view was that the role of Arbiter could only be conducted effectively if he was prepared for references and undertook preparatory work on matters relating to efficiency and Good Industry Practice. Once a reference was made, the timescales would make it impracticable to initiate major information collection

and analysis. Maintaining an appropriate level of knowledge on the programmes of the Infracos and on appropriate benchmarks was therefore important to carrying out functions.

- 4.8 Information sharing was however an area of contention between London Underground and the Infracos. London Underground argued that the Infracos should be more willing to share information with it, including for example detailed cost data and contracts with suppliers. The Infracos argued that certain arrangements were commercially confidential. There was a clear tension between transparency and the fact that the PPP Agreement was a commercial transaction. This initial tension and the discussions around what was an appropriate level of transparency affected the relationship between the parties from the outset and was never satisfactorily concluded.
- 4.9 The Arbiter's general approach was to look at what information was routinely collated and shared between the Parties and to seek access to that which he considered relevant to his remit. In the main his needs were met by such 'routine' data supplemented by regular meetings. However, a small subset of commercially confidential information that would only be available to the Arbiter was also identified; this included for example Board papers relevant to large scale investment or other spending and risk registers. It was however made clear to the Parties that in a reference the presumption would be that all data should be shared on a fully transparent basis.
- 4.10 A year after implementation of the process for submitting routine returns, a review was undertaken and the requirements refined. As part of this review and with a background of growing concern around Metronet's ability to deliver the PPP capital, it became clear that more work would have to be done to ensure that cost data was accurate and that presentation of costs data by the Infracos was on a consistent and comparable basis.

### **Developing the DBS**

- 4.11 As noted above, London Underground argued on a number of occasions that the Arbiter should make more use of his information powers to obtain, and make available to London Underground, information from the Infracos. In many cases, this was a consequence of insufficient consideration being given in drafting the PPP Agreement to the monitoring information that was necessary and appropriate for London Underground, as client, to obtain.
- 4.12 As part of the PPP bidding process, standard form cost tables had been completed by all bidders and were updated at financial close and appended to the PPP Agreements. The PPP Agreements did not require that these be updated following Transfer or as part of the Annual Asset Management Plan (AAMP) process. It became clear, in preparing for the first Metronet Annual Report, that it was not possible to make meaningful comparisons between actual performance and the cost tables in the PPP Agreements because the programmes on which the cost tables were based were different from those actually adopted by the Infracos, and because financial reports were in a different format from the cost tables.

- 4.13 In particular, the financial systems of the Infracos moved on after transfer to a form that suited their internal reporting and formal accounting processes. However, Metronet and Tube Lines had a different approach and from the data routinely produced it was clear that comparisons to each other and against the cost baselines set out in the PPP Agreements were becoming increasingly difficult, with a significant amount of manipulation required before analysis could be carried out on a like for like basis.
- 4.14 The Arbiter therefore concluded that he would need to specify both the format of information to be produced, and the basis for annual reporting on variances, so that he could identify cost changes from Transfer, and compare outturn costs with the contract price. This led to the Arbiter and the Parties working together to create a standard Data Breakdown Structure (DBS) format that would be a mandatory component of all cost based references. In the event, the Parties agreed that these cost and reporting formats should be included in the AAMPs.

### **The role of Reporter**

- 4.15 Given this agreement to use the DBS in the AAMP process, the Arbiter proposed that independent reporters should be appointed, following the model adopted in the water and rail sectors, to provide independent assurance both to him and London Underground about the processes used to populate the DBS. Although Tube Lines and London Underground supported this proposal, it was agreed that the Arbiter should employ and pay for the Reporters.
- 4.16 Independent Reporters were first appointed in 2008 to produce two types of report: the first reviewing the Data Breakdown Structure (DBS), the second reviewing the Infracos' Annual Asset Management Plans (AAMPs).<sup>21</sup>
- 4.17 The Reporters' review of the DBS considered the suitability of each item of cost, volume, performance, revenue and access data in order to assess whether it was sufficiently detailed to meet the Arbiter's needs. Recommendations on changes to the DBS were made. The Reporters' review of the AAMPs provided an overview of the compliance of the AAMP with the DBS and assurance that the data contained in the AAMPs were consistent and robust.
- 4.18 Given the need to compare costs and performance of the Infracos, consistency across the three Infracos' submissions was particularly important. This continued to be important after the transfer of the Metronet Infracos to TfL in 2008. Because of further changes to financial systems, comparability of information between the three Infracos continued to be a problem throughout the Tube Lines Periodic Review.
- 4.19 Reporters were not routinely appointed to review submissions made by London Underground because it did not complete the DBS to the same extent as the Infracos in its submissions to the Arbiter. The Arbiter relied on the internal verification processes run by London Underground and on the sign off provided by its directors. However, as part of the Periodic Review, it became apparent

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<sup>21</sup> The reports were all published, and can be accessed at <http://www.ppparbiter.org.uk/output/page21.asp?DocTypeID=5>.

that London Underground had provided data to Tube Lines about the costs associated with the Victoria Line upgrade that could not be reconciled with data previously provided to the Arbiter. The Reporters were therefore asked to review the data sets and a reconciliation provided by London Underground on Victoria Line upgrade costs.

- 4.20 During their reviews, the Reporters examined the processes and procedures used by the Infracos and London Underground to produce the submissions to the Arbiter. The Reporters identified a number of significant shortcomings with respect to both the Infracos and London Underground's submissions. Areas of substance included misallocation of costs, incorrect work volumes and the inability to link work volumes to expenditure. Costs forecast by the Infracos were also found to be substantially overstated, with risk and contingency being inappropriately accounted for.
- 4.21 The Reporters also found substantial inconsistencies between costs reported for the same item, one example being for line upgrade signalling costs where Tube Lines reported total costs but the costs submitted by London Underground for the Victoria Line upgrade did not include contractors profit or overhead costs, which were around 30% of the total cost. Other areas lacking comparability were the allocation of head office costs and lack of transparency relating to the cost of services provided to the LUL Nominee Companies by London Underground or TfL.
- 4.22 The work of the Reporters was therefore valuable in understanding the basis of cost submissions and ensuring comparability. With the benefit of hindsight, earlier use of the Reporters on London Underground submissions would have been justified.
- 4.23 More generally, despite the Infracos introducing new financial systems, there was a lack of automation in producing the reports and it was difficult to reconcile reported figures with equivalent figures in the Infracos' statutory accounts. When the Infracos provided benchmarking data to the Arbiter, this was often assembled separately from both the processes used to produce the statutory accounts and those used to produce the DBS submissions and AAMPs. This made it difficult to check and reconcile the various data sources.
- 4.24 Although significant improvements have taken place, largely as a result of the Reporters' investigations, there is still some way to go to provide consistent and reliable reporting of cost, work volumes and access used. In contrast, few issues were identified in the reporting of performance, with performance figures generally accepted as being robust. This will present an ongoing challenge to the Independent Investment Programme Advisory Group.

## 5 Benchmarking

5.1 This chapter provides background information on the development of the OPPPA benchmarking programme. It covers:

- objectives;
- the history of the work and the methodology adopted; and
- lessons learned.

### Objectives

5.2 A key concept in the PPP Agreements is that of the Notional Infraco: the entity with the same contractual obligations and financing as the actual Infraco but which has carried out its obligations since Transfer in an “overall efficient and economic manner and in accordance with Good Industry Practice”. Although the PPP Agreements identify some characteristics of Good Industry Practice, the implementation of this concept is left to the Arbiter. The Parties have however given guidance to the Arbiter that is considering Notional Infraco costs he should, among other things, consider:

- “efficiency savings that can reasonably be expected based on the experiences of other Infracos and other participants in markets relevant to the Infraco’s activities”; and
- “trends in costs that have been exhibited in similar industries in the past”.<sup>22</sup>

5.3 The objective of the Arbiter’s benchmarking programme was therefore to compare Infraco performance and costs with other peer metros in order to identify efficient levels of cost and performance that were consistent with good industry practice elsewhere. This was intended to both provide evidence of efficient level of costs to support guidance and directions and to and to identify efficient practices that could be adopted by the Infracos thus providing higher levels of performance and lower costs.

### History and methodology

5.4 The primary focus of the Arbiter’s benchmarking was on three core areas of work regularly performed by all metros: track, signalling and rolling stock maintenance. Track renewal and signalling upgrade costs were also studied as these represented large areas of expenditure for the Infracos. The benchmarking was not restricted to assets and also covered efficiency (total factor productivity and frontier shift) comparisons and central costs although, given the unique structure of the Infracos, some costs in the latter category were more straightforward to assess than others.

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See section 6 of the Guidance at [http://www.ppparbiter.org.uk/files/uploads/j\\_pppAgreementExtracts/200621014219\\_JNP%20Schedule%201.9%20of%20the%20PPP%20Agreement%20Service%20Contract%20\(01\\_01\\_03\)%20DM11278v1.PDF](http://www.ppparbiter.org.uk/files/uploads/j_pppAgreementExtracts/200621014219_JNP%20Schedule%201.9%20of%20the%20PPP%20Agreement%20Service%20Contract%20(01_01_03)%20DM11278v1.PDF).

- 5.5 Over the last seven years, the Arbiter has commissioned a number of studies to consider the benefits and possible approaches to benchmarking asset activities.
- 5.6 Initial studies considered how to best to approach benchmarking<sup>2324</sup>. This was followed by a study assessing the possible scope for efficiency savings in operating, maintenance and renewals expenditure in the second Review Period.<sup>25</sup> The overall conclusion on efficiency was that efficiency improvements of between 3 and 4 per cent per year could be achieved during the second Review Period. A further report considering various detailed performance measures and benchmarking methods was published in June 2007.<sup>26</sup>
- 5.7 In parallel with this work commissioned by the Arbiter, London Underground and the Infracos produced annual reports of an 'internal' benchmarking exercise, looking at the costs of the three Infracos. In order to assess the usefulness of this work as a starting point for the Arbiter's analyses, the Arbiter commissioned a review.<sup>27</sup> This confirmed that, while internal benchmarking could provide useful information, it was unlikely that good industry practice could be established purely from a review of Infraco costs.
- 5.8 The Arbiter considered whether the information developed over a number of years by the CoMet and Nova groups of international metros, collected and analysed by Imperial College, would be sufficient for his needs. However, following detailed discussions and some development work by Imperial College, he concluded that the scope of this database and restrictions on its use precluded this being the sole basis of his international benchmarking information.
- 5.9 The Arbiter therefore put in hand a more extensive international benchmarking programme, using a questionnaire specifically developed for this purpose, and published a series of reports.<sup>28</sup> These reports compared the costs and performance of the Infracos against those of an international peer group and in doing so identified numerically the level of costs consistent with good practice.

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<sup>23</sup> Approaches to benchmarking Infraco efficiency and performance, July 2003, at [http://www.ppparbiter.org.uk/files/uploads/d\\_benchmarking/2006313172549\\_CEPA%20Benchmarking%20Efficiency%20&%20Performance%20\(01\\_07\\_03\)%20Combined.pdf](http://www.ppparbiter.org.uk/files/uploads/d_benchmarking/2006313172549_CEPA%20Benchmarking%20Efficiency%20&%20Performance%20(01_07_03)%20Combined.pdf).

<sup>24</sup> Internal Benchmarking, August 2005, at [http://www.ppparbiter.org.uk/files/uploads/d\\_benchmarking/200652101936\\_Internal%20Benchmarking%20Stage%20-PWCv2%20Stage%201%20Final%20Report%20\(23\\_08\\_05\)%20DM15789.pdf](http://www.ppparbiter.org.uk/files/uploads/d_benchmarking/200652101936_Internal%20Benchmarking%20Stage%20-PWCv2%20Stage%201%20Final%20Report%20(23_08_05)%20DM15789.pdf).

<sup>25</sup> High level efficiency estimates for the second Review Period, March 2006, at [http://www.ppparbiter.org.uk/files/uploads/d\\_benchmarking/200661592945\\_High%20level%20efficiency%20final%20report%20\(150606\)%20DM15712%20.pdf](http://www.ppparbiter.org.uk/files/uploads/d_benchmarking/200661592945_High%20level%20efficiency%20final%20report%20(150606)%20DM15712%20.pdf).

<sup>26</sup> Benchmarking of track maintenance and renewal costs: Stage 1 – Concept, June 2007, at [http://www.ppparbiter.org.uk/files/uploads/d\\_benchmarking/20076115320\\_LLRR%20Maintenance%20Benchmarking%20Stage%201%20Final%20Report.pdf](http://www.ppparbiter.org.uk/files/uploads/d_benchmarking/20076115320_LLRR%20Maintenance%20Benchmarking%20Stage%201%20Final%20Report.pdf).

<sup>27</sup> Review of joint benchmarking: report on general approach and Periodic, August 2007, at [http://www.ppparbiter.org.uk/files/uploads/d\\_benchmarking/200788115726\\_JB\\_PR\\_Final\\_Report\\_27\\_07\\_2007.pdf](http://www.ppparbiter.org.uk/files/uploads/d_benchmarking/200788115726_JB_PR_Final_Report_27_07_2007.pdf).

<sup>28</sup> These are published at <http://www.ppparbiter.org.uk/output/page22.asp?DocTypeID=7>.

They clearly showed that the Infracos' costs were well above those of the international peer group, and identified a number of practices employed by the more efficient metros that might be transferrable to the Infracos. The most recent report confirmed these general findings, and also confirmed that Tube Lines' costs were generally lower than those of the LUL Nominee Company Infracos BCV and SSL, and were generally trending down unlike those for BCV and SSL.

- 5.10 Supporting the efficiency studies, the Arbiter also commissioned from Halcrow a report on the likely timescales involved for an Infraco to move to Good Industry Practice.<sup>29</sup> This report considered the time that it would take a prospectively efficient Infraco to align its extant working practices with good industry practice. For the areas covered in its report, Halcrow concluded that Good Industry Practice could be attained within one year for areas such as line upgrades and within four years for areas such as stations and track asset performance.
- 5.11 Because of the reliance he was placing on the results from international benchmarking, the Arbiter commissioned Dr Andrew Smith of the Institute of Transport Studies at the University of Leeds to review the approach taken by Lloyd's Register Rail (BSL). His report broadly endorsed the approach taken for selecting appropriate comparators and the data collection process, but made some suggestions about data analysis which were reflected in the subsequent analysis by Lloyd's Register Rail.

### **Lessons learned**

- 5.12 Unless useful international comparative data, of understood quality, is already available, considerable time and effort is required to collect it. Benchmarking processes are time consuming for all involved and require a significant level of commitment from all participants.
- 5.13 The effort required to establish and maintain an appropriate international peer group in this case was considerable. It was important that the peer group, not just the sponsor, receive significant value for the considerable effort needed to participate in a meaningful benchmarking exercise. It was notable that the willingness to maintain involvement in the work decreased once it was clear that the role of the Arbiter was to come to an end.
- 5.14 Many benchmarking exercises lack credibility because there is little or no challenge of information provided by participants. The Arbiter was concerned to avoid this in his studies, but the meetings with his consultants to validate returns required a considerable time input by peers. As a result was not possible to drive the process to a very firm timetable as operational requirements of the peers often took priority over participation in the studies. It was therefore necessary to allow flexibility in the timetable for the work.

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<sup>29</sup> Review and definition of 'glidepath' to Good Industry Practice, June 2007, at [http://www.ppparbiter.org.uk/files/uploads/m\\_goodindustrypractice/200761153934\\_Halcrow%20N%20Glidepath%20Stage%201-2%20Report.pdf](http://www.ppparbiter.org.uk/files/uploads/m_goodindustrypractice/200761153934_Halcrow%20N%20Glidepath%20Stage%201-2%20Report.pdf).

- 5.15 In any comparison of a number of large organisations, it is not possible to cover every area of activity in detail. For benchmarking to be useful and manageable, it was essential to focus on key areas that are both important and measurable and to disregard less important areas. Disaggregated asset activities such as maintenance costs for track or rolling stock could be successfully compared, provided definitions of work and cost coverage were clearly established.
- 5.16 In the earlier benchmarking reports, it was not possible to identify the metro associated with any given data point. This lack of transparency significantly impeded the usefulness of the results and led to many challenges from the Infracos and London Underground regarding comparability of particular results. In the final report the identity of the peer associated with each data point was fully transparent to all the participants, on the basis of confidentiality agreements with them, which greatly improved the usefulness of the report and associated discussions.
- 5.17 To achieve statistical robustness requires large number of data points, which in turn requires a large number of participants or alternatively data collected over a long period of time. Collecting data for extended time periods has benefits in drawing out trends in the industry and provides significant benefit to the individual participants, but the timing of the Periodic Review meant that only a limited number of years' data could be collected. The life cycle of rail assets covers many decades and great care should be taken to avoid comparisons over relatively short periods being distorted by lumpy investment activities. Had the role of the Arbiter continued, Chris Bolt would have envisaged the studies being repeated periodically, possibly bi- or tri-annually, in order to establish a longer time series for the next Review.
- 5.18 Given the limitations on the statistical robustness of the results, particularly given the need to take account of different structural factors, interpretation of the results requires significant expert judgment. There is a very significant role for experienced business managers and engineers in developing questionnaires containing definitions of cost and activities, in deciding the appropriate data to collect and in challenging and interpreting the raw statistical results.

## 6 Handling references

6.1 This chapter discusses:

- development of the procedural framework and approach documents;
- procedures and timescales; and
- lessons learned.

### Procedural framework and approach documents

6.2 The GLA Act does not prescribe the approach which the Arbiter should take to references. The Guidance to him from the Parties covered some matters in relation to Periodic Review and Extraordinary Review directions, in particular that he should follow “open and transparent procedures”.

6.3 In order to provide clarity on the approach he would follow, and to enable him to have some control over the timetable for a reference, the Arbiter concluded that he should develop a ‘procedural framework’ for all references, supplemented by more specific guidance on the handling of different types of reference. He reached this view in particular given the novelty of the role of Arbiter, and the extent of possible ‘regulatory risk’ associated with it.

6.4 Following a lengthy consultation process, the Arbiter published in 2004 a Procedural Framework for the handling of references. In addition to the overall framework, he published documents covering his expected approach to the references which could be anticipated at that time: the Annual Metronet report, Extraordinary Review and to an ‘unanticipated’ request for guidance.<sup>30</sup>

6.5 The approach to Periodic Review was not developed initially on the basis that much would be learned from other reference processes that were likely to be completed before the Periodic Review commenced. Discussions about how the Periodic Review should be handled started more than two years before the end of the review period but it took some for the Parties to engage with these particularly given the collapse of Metronet and the work that flowed from that. A procedural approach to Periodic Review was published in June 2008 and updated in March 2009, prior to the formal reference being made.

6.6 A full chronology of the references made to the Arbiter is at Annex 1.

### Procedures and timescales

6.7 The procedural framework includes a requirement for the referring Party to submit a Reference Notice with the reference, specifying the matter referred and the required timescale for the Arbiter to give guidance or directions. The Arbiter encouraged the Parties to have preliminary discussions with him before making a reference, and this happened in all cases.

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<sup>30</sup> These documents, including subsequent updates, are at <http://www.ppparbiter.org.uk/output/page25.asp?DocTypeID=10>.

- 6.8 The first stage in the reference process was the post-reference meeting. This meeting included all the Parties involved in the reference, and was designed principally to discuss procedure and timetable.
- 6.9 In all cases the Arbiter has worked within the timescales sought by the referring parties. In some cases, these were particularly challenging, such as the request by Metronet to give a direction on interim ISC within four weeks of the reference being made. This has only been possible given both the preparatory analysis undertaken by the Arbiter and prior notice of the reference being made.
- 6.10 In general, the Arbiter has aimed to reach draft decisions within 3-4 months of receipt of a 'complete' reference (ie from the date of the full submission rather than the date of the reference itself). All reference timetables have allowed for substantive consultation with the parties on the draft findings.
- 6.11 Where significant issues have emerged during a reference, the Arbiter has often prepared an 'issues paper' as a basis for the Parties to make representations on matters of principle in advance of any draft guidance or direction.
- 6.12 References on matters of principle, such as that relating to investment straddling a Periodic Review, were handled by the Arbiter's team with some engineering support as necessitated by the detailed subject matter. Costs for these references have been accommodated within the Arbiter's routine operating budget.
- 6.13 In complex reference processes, the Office team has been supported by external Technical, Economic and Financial/Commercial advisers appointed under the OJEU process. These arrangements provided the flexibility needed to respond to a reference effectively, which requires additional resources to be available quickly.
- 6.14 There have however been some risks associated with this model where new advisers have been brought in who do not necessarily have detailed prior knowledge background and understanding of the PPP. For the Periodic Review, this issue was addressed by appointing consultant advisers at an early stage, and undertaking preparatory work in advance of the reference being made, so that the required understanding could be developed sufficiently well in advance of preparing the guidance and directions requested by London Underground
- 6.15 As a result of using external advisers, more substantive references such as the Annual Metronet report or Extraordinary Review have cost between half and one million pounds. The Periodic Review (including the 'initial ranges' reference) which required significantly more external advice cost approaching two million pounds to complete. Informal discussion with regulatory bodies carrying out analogous work suggest that costs of this order are in line with good practice demonstrated elsewhere

### **Lessons learned**

- 6.16 As has been the case in many PPP deals, the experience of the transaction team was largely lost to the Parties by the time the PPP Agreements were truly tested and a lack of corporate memory led to a significant amount of work to get back

up the learning curve.<sup>31</sup> The reference processes have been revealing for the Parties in particular as they have considered in detail the precise contract drafting and considered its implications for the handling of references, in many cases for the first time.

- 6.17 Although the PPP Agreements anticipated change in the contracts, the Parties were not good at capturing this consistently or comprehensively. Although processes for recording contract changes were put in place, mechanisms for capturing agreed changes to costs were never formally established in a centralised fashion and the baseline contract costs were never formally updated. This led to confusion about the appropriate cost baseline for references, and was a significant issue in the Metronet Extraordinary Review.
- 6.18 Establishing the DBS as the formal means of recording actual and forecast cost data was a matter on which the Arbiter had to take the lead. Its development has been time consuming, given that Infracos' systems did not in all cases support the consistent breakdown required by the Arbiter. Despite the Reporters' recommendations, there remains much manual manipulation of data into the form of the DBS with the consequent risk of errors being introduced, data not being updated in line with accounts, etc.
- 6.19 Despite many years of work and significant spend, the Infracos were still unable to link costs, work volumes and performance on a consistent basis. This is a significant issue not only in pricing future work programmes in the context of Reviews but more importantly raises questions about their ability to optimise the management and renewal of their assets.
- 6.20 The PPP Agreements broadly focus on the performance of the Infracos but their delivery is inevitably affected by the approach of London Underground both as client and as operator of the underground network. In most references, Infracos argued that London Underground's approach inhibited their ability to perform efficiently. These arguments are difficult to substantiate and it is hard to conclude that Infracos did enough to influence London Underground's behaviour. However, it seems likely that the delivery was in some areas impeded by London Underground and the Arbiter's powers to address matters such as this directly were limited.
- 6.21 In part because of the contractual nature of the PPP Agreements, but also the unclear distinction between dispute resolution and the Arbiter's role and lack of clarity on contractual drafting, some of the reference proceedings have become unduly influenced by legal issues. Even without this, the process of the Parties making submissions, the Arbiter considering them and issuing draft directions and guidance, the Parties making representations and the Arbiter considering those in issuing final directions and guidance has created a significant pattern of peaks of workload within the relatively short timescales for a reference.

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<sup>31</sup> Ironically, the Arbiter inherited some of this corporate memory as three members of his initial team (including the Director and Commercial Adviser) had been involved in it.

6.22 For example, if the Periodic Review is considered as including the initial ranges reference and prior discussion on the procedural and analytical frameworks, then the overall timescale of around two years is not inconsistent with that in other sectors. But given that each reference within the overall process has its own timetable and iterative process , the result in practice has probably been more burdensome for all concerned that where prices are reset at the initiative of a regulator in a licence condition.

## Annex 1

### Reference chronology

Date	Reference
<p>10 May 2006</p> <p>29 September 2006</p> <p>16 November 2006</p>	<p><b>Annual Metronet Report 2006</b></p> <p>Reference received asking the Arbiter to take a view as to whether, in the round, the Metronet Infracos were economic and efficient and acting in accordance with Good Industry Practice.</p> <p>Draft Guidance and Advisers' Reports issued</p> <p>Final Guidance published. The Arbiter concluded that the Infracos were not performing as the PPP Agreement expected and that an Extraordinary Review might be necessary</p>
<p>10 May 2006</p> <p>12 September 2006</p> <p>24 October 2006</p> <p>8 November 2006</p>	<p><b>Investment which straddles the Periodic Review</b></p> <p>Reference Application Notice from Tube Lines seeking guidance on the treatment of investments that straddled the periodic review</p> <p>Draft for representations</p> <p>Revised draft guidance for representations –</p> <p>Final Guidance – which concluded that the Infraco was required to make investment decisions without considering the impact of Periodic Review and that under the terms of the PPP Agreement it was not possible for the Arbiter to specifically remunerate Infraco for costs incurred in the previous period.</p>
<p>13 November 2006</p> <p>1 December 2006</p> <p>13 March 2007</p>	<p><b>Treatment of investment at Extraordinary Review</b></p> <p>Reference for Guidance received from MRSSL and MRBCV seeking the Arbiter views on the economy and efficiency of certain key investments</p> <p>Draft guidance</p> <p>Final Guidance – which considered the evidence presented</p>

	in relation to particular projects being reviewed and provided guidance on the supporting evidence that would be required for Extraordinary Review
	<b>Metronet BCV Extraordinary Review</b>
28 June 2007	Reference for directions MRBCV Extraordinary Review
16 July 2007	Draft directions on Interim level of ISC (interim funding to enable continuation of the work programme by the company pending the outcome of the wider review)
21 September 2007	Initial thoughts on Net Adverse Effects and Form and structure
22 October 2007	Draft Directions on Form and Structure of Extraordinary Review Reference for Directions from Metronet Rail BCV Ltd
20 December 2007	Issues Arising Reference for Directions from Metronet BCV Rail Ltd for Extraordinary Review <i>The reference was withdrawn following the [exit from administration] i.e. takeover by TfL</i>
	<b>Initial Range of future costs for Tube Lines</b>
14 April 2008	Reference for guidance from London Underground seeking the Arbiter's view on the likely range of costs for the second review period
23 April 2008	Arbiter's decision on whether to give guidance
30 April 2008	Procedures and Timetable for Initial Ranges Request for Guidance
16 July 2008	Issues Paper: Issues relating to the initial range of future costs for Tube Lines
14 August 2008	Issue of draft Guidance to LUL and Tube Lines
9 September 2008	Arbiter's final guidance on the initial range of future costs for Tube Lines which was set at 5bn-5.5bn based on contractual obligations as they stood in September 2008.
	<b>Tube Lines Periodic Review</b>

23 September 2009	Periodic Review reference made by London Underground seeking the Arbiters directions on the costs for the second review period based on restated contract terms and on the level of the ISC and various related matters
17 December 2009	Draft directions on costs and related matters
10 March 2010	Draft directions on the level and profile of the ISC, financing and related matters
10 March 2010	Directions on costs and related matters which concluded that the appropriate level of costs for the amended contract terms was £4.4bn
27 April 2010	Periodic Review of Tube Lines' PPP Agreement Direction of financing impossibility