

**Date:** 30 July 2015

**Item:** Independent Investment Programme Advisory Group –  
Annual Report 2014/15

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**This paper will be considered in public.**

## **1 Summary**

- 1.1 This paper attaches the Independent Investment Programme Advisory Group (IIPAG) Annual Report for 2014/15 (Appendix 1) and provides the TfL management response.

## **2 Recommendation**

- 2.1 **The Committee is asked to note the Independent Investment Programme Advisory Group's Annual Report for 2014/15 and to endorse TfL's management response, for approval by the Mayor.**

## **3 Background**

- 3.1 The IIPAG Terms of Reference, established in 2010, require the production of three annual documents. Two of which, the IIPAG Work Plan and Budget, were submitted to the Committee in June 2015. This paper provides the third document, the IIPAG Annual Report for 2014/15, which reports on TfL's delivery of its Investment Programme for the period from April 2014 to March 2015. The Annual Report includes the Annual Benchmarking report as an appendix.
- 3.2 The IIPAG submitted its Annual Report to TfL on 5 May 2015.

## **4 Commentary**

- 4.1 TfL makes a number of observations and comments on the content of the IIPAG Report, which are summarised below.
- 4.2 **Project Reviews** (IIPAG report section 2)
- (a) **Approach (section 2.1):** The IIPAG's input to the Integrated Assurance Reviews (IARs) is central to the assurance process. The new Three Lines of Defence assurance framework was approved by the Committee in January 2015. The model clarifies the IIPAG's position as the Third Line of Defence – being independent of the organisation. TfL Project Assurance was transitioned from the Programme Management Office (PMO) to the Managing Director (MD) Finance on 1 January 2015. Since then, the organisational, structural and cultural changes to the assurance framework have benefited from the IIPAG's input and advice.
  - (b) In particular, the IIPAG has supported the proposed structure for the Second Line of Defence that will strengthen the capability and capacity of the TfL

Project Assurance team, enabling it to provide more proportionate assurance of projects, based on their risk. Both TfL Project Assurance and the PMO are continuing to engage with the IIPAG as the Three Lines of Defence assurance model is developed and implemented. A more detailed update on the new assurance framework was provided to the Committee in June 2015.

- (c) The IIPAG has supported the approach to conducting reviews using internal peer teams. Under the Three Lines of Defence model, the First Line will include more peer reviews, normally conducted by teams within the same department. TfL Project Assurance will continue to use peer teams for a proportion of the IARs, for the Second Line of Defence but there is clearly a capacity constraint on the number of peer reviews that can be conducted. The First Line of Defence reviews will take the highest priority under the new model. While 18 per cent of the IARs in 2014/15 used peer teams, it is unlikely that more than 15 per cent will be achieved in 2015/16. The total number of peer reviews, including the First Line of Defence, is likely to increase significantly.
- (d) **Gateway Reviews (Project Close-Out):** It is recognised that improvement is needed to achieve project close out consistently. The Pathway Refresh Programme in 2015/16 will pay particular attention to how projects can be formally closed and how benefits will be captured. The Jubilee Line Upgrade was handed over in 2015/16 into maintenance as one significant example.
- (e) **Network Rail:** The IIPAG has stated that the coordination of work with Network Rail (NR) should be improved. TfL works with NR on all relevant projects. Large projects with significant NR collaboration include the immunisation of the new trains for the Sub Surface Upgrade programme. The Croyley Rail Link is not a good example of poor coordination with Network Rail – it has been owned by Hertfordshire County Council until very recently. TfL has only had the ability to influence, rather than direct, how the project has been managed.
- (f) The IIPAG's acknowledgement of best practice in a number of projects is noted.
- (g) **Review of Project Progress Dashboards (section 2.4):** The Project Dashboards have been developed further throughout the year and are a subject of continuous improvement – recent changes to enable a commentary on deliverability rather than a simple status grade links the dashboard more closely to the project managers' views on progress.
- (h) **Sub Surface Upgrade Programme Automatic Train Control (section 2.5):** As noted, the cooperation with the IIPAG has been good during the preparations for awarding the new signalling contract. The level of engagement with the IIPAG is considerable and can be seen in the level of detail reported.
- (i) The IIPAG makes reference to a series of unrealistic target dates that have been set and missed for the award of the signalling contract. Any targets have only been internal aspirations and it was always clear that no approvals would be sought until London Underground (LU) is ready and content with the

arrangements.

- (j) As was stated in TfL's response to the IIPAG's Annual Report 2013-2104 at the meeting of the Committee on 17 July 2014, TfL does not agree with the IIPAG's recommendation that further investigation is required into the circumstances surrounding the letting of the original contract. TfL commissioned a thorough lessons learnt exercise from KPMG which was considered by the Committee on 17 July 2014. The Committee established a Special Purpose Sub-Committee to consider in detail the findings from the KPMG report. The Special Purpose Sub-Committee reviewed the KPMG report and TfL's Management Response on 20 August 2014. The work of this Sub-Committee was reported to the Committee on 11 March 2015.

- (k) **Cycling Vision (section 2.6):** Noted.

#### 4.3 **Systemic Issues** (IIPAG report section 3)

- (a) **Sponsorship and Project Initiation (section 3.2):** The IIPAG recognises the improvement in TfL's sponsorship capability. TfL continues to implement its Sponsorship Capability Improvement Programme and will assess the need for further work in the very early stages of projects, which will also be captured in the Pathway Refresh project.
- (b) **Organisational Issues (section 3.3):** The IIPAG has provided significant input to the development of the new assurance framework, based on the Three Lines of Defence. Project Assurance will continue to work closely with the IIPAG during the recruitment and implementation stages. Similarly, the PMO is liaising with the IIPAG to ensure that the changes being made are fully understood and supported. The detailed progress to date was reported to the June meeting of the Committee.
- (c) **Procurement and Commercial (section 3.4):** One quarter of the IIPAG's recommendations made in their project review reports relate to commercial issues (albeit many of the recommendations relate to unique or specific issues relevant to projects and are not indicative of systemic failings).
- (d) **Commercial Organisation, Roles and Responsibilities (3.4.1):** The Commercial and Financial functions adopt similar models across most of TfL but there are some business areas where Commercial does not follow the same model. A review of Commercial was undertaken in 2014 as part of a general review of the efficiency of support services. The leadership team concluded that the organisation should not change but that the MD Finance would chair a Commercial Leadership Group with representation from all directorates with commercial functions. The group has met since late 2014 and driven the development of the refreshed Commercial Strategy which was adopted by the Rail and Underground and Surface Transport Boards in May 2015.
- (e) TfL does not accept that there is a lack of leadership or co-ordination of commercial. The Commercial Strategy has been shared with the IIPAG and comments invited. The work plans that sit under the Strategy will be developed over the next quarter. The ongoing activities which are consistent with the Strategy will be continued.

- (f) The Commercial and Finance teams that are embedded within project teams have been operating successfully for some time within TfL. The Finance and Commercial teams will continue to ensure that their respective accountabilities are clear. TfL will continue to engage with the IIPAG over the Commercial function including its organisation (although the leadership team is responsible for organisational decisions).
- (g) The Commercial Centre of Excellence has been in existence for the past 3-4 years and has provided standard policies, practices and commercial products which are reflected in Pathway and have been developed in collaboration with the Project Management Centre of Excellence.
- (h) TfL does not accept that ad hoc actions are undertaken by individual managers – all material decisions are subject to scrutiny and review by the operational boards attended by the MD Finance and where necessary, authorised at a higher level in accordance with Standing Orders with most important decisions being authorised by the Board informed by IIPAG advice.
- (i) The IIPAG has proposed some performance indicators which will be considered. The data relevant to the performance indicators is in most cases already collated and considered at a project level and/or in project dashboards.
- (j) The need to embed a commercial culture across TfL is acknowledged and commercial acumen has been incorporated as part of the senior management leadership programme, with managers being assessed for their commercial capabilities.
- (k) **Recruitment and Retention of Commercial Staff (3.4.2):** It is agreed that the quality of TfL's portfolio should provide an opportunity to develop and retain a high calibre commercial team. However the problems in recruitment and retention are not unique to TfL and are also being experienced by Crossrail, HS2, Thames Tideway and NR who also have attractive portfolios – this is part of a national and global skills shortage problem applicable to infrastructure projects. TfL considers that it is wrong and potentially damaging to TfL's interests to attribute a market-wide problem experienced by other public sector entities and consultancies to TfL's leadership and organisation.
- (l) There has been very little turnover at senior level and the assertion that staff are leaving because they are not comfortable with Commercial arrangements within TfL is misleading and does not constitute a trend. The IIPAG comment is understood to be a reference to one individual. In recent years, many senior recruits have joined from external organisations and have been retained and promoted. Turnover is primarily related to junior staff in the early years of their career who are being attracted to other client organisations and consultancies (who recognise the quality of training and experience within TfL).
- (m) TfL has developed an HR Strategy addressing both recruitment and retention issues within Rail and Underground (R&U) Projects which has been shared recently with the IIPAG. The strategy has introduced different roles within Bands 3 and 4 (which have very broad pay ranges) to provide a clear career

development path for commercial staff. A recruitment campaign is ongoing using very different approaches to the ones previously used, effectively marketing the jobs to a wider audience. LinkedIn has enabled direct approaches to be made to commercial managers within other relevant organisations.

- (n) The recruitment campaign is underway and is delivering reasonable results for experienced commercial managers rather than at the most senior levels. However, external recruits in previous recruitment rounds have been successful in applications for senior roles – for the first time in three years, there is almost a full complement of senior managers within Commercial R&U.
- (o) TfL does not consider the overlap between pay bands 2 and 3 to be an issue. Those who enter at Band 2 and show talent and appropriate behaviours have rapid opportunities for promotion to Band 3.
- (p) **Training in Commercial Skills (3.4.3):** An extensive training programme is being provided by the Commercial Centre of Excellence, for example in relation to the new EU procurement rules and management of NEC3 contracts. Evaluation of the tangible benefits of training is difficult for all organisations. The IIPAG has suggested some Key Performance Indicators for projects such as movements in the estimated final cost and numbers of disputes resolved in favour of TfL. Although these may be useful measures generally, it is very difficult to establish a direct link to the effectiveness of commercial training. The Commercial Centre of Excellence is assessing how it can develop its evaluation methodology in line with good practice in other organisations.
- (q) **Interfaces between TfL and Supply Chain (3.4.4):** TfL has fully assessed the risks of using the construction management approach in the delivery of various portfolios, particularly in LU Stations. The principal issue has been managing risk for those works close to the operational railway. The Station Project teams are in the best position to agree the access regime and arrangements with Station Operations Management, to maximise working time, whilst minimising the impact on operations. This has been further improved by the new recently implemented Stations access protocol that builds in risk assessment as the basis for the access being requested. This approach was first implemented in 2005 by one of the PPP companies and subsequently adopted in LU – there is now a good track record of successfully delivering in this way.
- (r) The Functional Head of Risk position has been filled by an external candidate who is bringing industry perspectives and behaviours to the role. The position will be retained within the PMO to focus on providing direct advice and support to project teams.
- (s) **Intellectual Property (3.4.5):** The leadership team is reviewing the standard terms and guidance currently in place. Intellectual Property Rights is routinely considered as part of procurement strategies and, where projects include operational technology, including Cycle Hire and Power control networks, special scrutiny is being applied pending the outcome of the wider review.

- (t) **Cost Estimating (3.4.6):** TfL acknowledges the IIPAG's recognition of the progress made. Strong estimating will remain a cornerstone in TfL's ambition to be an informed and intelligent client throughout the project lifecycle.
- (u) **Procurement (3.4.7):** The real value of the Innovative Contractor Engagement procurement method (ICE) is that bidders are encouraged to generate good ideas early in the process and these ideas are given protected status throughout the bid period – no other procurement model achieves this. While ICE has delivered good outcomes for a number of major projects, TfL acknowledges that it may not be suitable in all circumstances; procurement plans need to be developed with the specific requirements of a project or programme in mind.
- (v) TfL fully accepts that the ITT and contract must be fully developed and of sufficient quality before a tender process starts. TfL is not aware of any circumstances in recent times where this has not been the case. The new EU procurement rules to be implemented this year will drive the need for full documentation to be ready at the start of a competition rather than the ITT.
- (w) **Commercial Administration (3.4.8):** TfL is reviewing its standard terms and the changes are with the IIPAG for review. TfL agrees that incentive payments should only be introduced post contract in exceptional circumstances and that proper time is needed for review of proposals. However, it is not always possible to unequivocally demonstrate good value in circumstances where professional judgement is necessary. Any negotiation with contractors is dependent on what can be agreed between the parties – while it is relatively easy to question certain aspects of an arrangement, negotiations need to be viewed as a package. In such cases, the executive judgements may be different from the IIPAG's expectations. The role of assurance is to establish that the arrangements are within acceptable parameters.
- (x) For some of the larger projects, TfL has established a Conflict Avoidance Panel based on the model used by the Olympic Delivery Authority. The panel comprises senior independent figures that can deliberate on issues to avoid lengthy and costly legal proceedings.
- (y) TfL is happy to support a review by the IIPAG of the cause and effect of contract changes and has already undertaken some preliminary work in this area.
- (z) **Research and Development (R&D) (section 3.5):** While TfL has only a small R&D budget, it commissions a number of research and development work streams through individual projects and programmes. A portfolio of projects in LU will develop predictive maintenance regimes that are based on new measurement and modelling techniques to pre-empt asset failures and improve network reliability. Similar initiatives are underway in Surface Transport relating to highways and traffic assets. These projects benefit from significant input from public and private sector organisations and from universities.
- (aa) Further industry-leading innovations have been developed and implemented,

including the overnight ballasted track replacement. TfL has also created a new Innovation Council involving both MDs for Surface and R&U, to provide visible senior support.

- (bb) **Commercial Development and Secondary Revenue (section 3.6):** Noted.
- (cc) **Telecommunications section 3.7):** A great deal of work has been undertaken to construct a viable approach to the sub-optimum and fragmented nature of TfL data networks.
- (dd) TfL's assessment of the data network/telecommunication spend was driven by the need to fully understand the scale of the change needed. The £300m annualised figure is a high level estimate which does not distinguish between capital and operational expenditure. Better definition, visibility and controls will need to be determined and applied prior to rationalising the cost base. This is was noted and agreed as a strategic enabler by the TfL leadership team.
- (ee) TfL is addressing the management and organisational issues as another key strategic theme. Specifically, IM is recruiting a Programme Director for Networks to drive the change agenda forward. Both R&U and IM will collaborate on thinking and agendas.
- (ff) Data Networks form an integral part of the technology system and are expected to become commoditised services to the business. This needs to become a core competency for IM, enabling the operational business to focus on the provision of accurate data and applications to drive effective operations.
- (gg) The Single Delivery Unit (SDU) using external resource is designed to source best practice quickly; sourcing from across the business is problematic and likely to be more disruptive rather than supportive in the first instance. The approach and structure of the SDU model is used extensively within industries providing network services.
- (hh) Network security is a cornerstone of any network change effort. This is recognised on two fronts, namely the overarching policy by the Chief Information Officer's Chief Information Security Officer and the formation of specific expertise both within R&U and the SDU units.
- (ii) The IIPAG's commentary fails to recognise the need to segregate data networks carrying safety and security critical applications such as railway signalling systems, electrical power control systems, operational radio and the emergency services radio system below ground. In particular, LU traditionally separates safety-critical voice communications from signalling, which provides resilience in degraded or emergency mode operations – an arrangement which is not proscribed in any EuroNorms. As technology improves, it may become possible to merge these functions into single networks but the decision will ultimately rest with the MD R&U.
- (jj) The network contractual arrangements across TfL are very complex. Large proportions of the overall quoted annual spend are locked into existing contracts, such as the Connect PFI contract which lasts until 2019. In addition, some network projects are very complex, including the upgrade of

the Emergency Services Radio system, which is being pursued in conjunction with the Home Office.

- (kk) TfL has a programme of work to progressively rationalise its data networks in accordance with the realities of existing contractual arrangements and organisational capacity, while safeguarding the operational and business critical systems these networks support. TfL acknowledges that, over time, as networks and contracts are carefully rationalised so that operational and business integrity is protected, then savings will be achieved. However, there is no analysis to support the figure of £100m per annum suggested by the IIPAG.
- (ll) **Standards and Specifications (section 3.8):** LU carried out a major rationalisation of the engineering standards after the cessation of the PPP contracts, reducing the total from over 2000 to 130. The remaining standards of the 1,182 quoted by the IIPAG are not engineering standards but cover operations and design. The engineering standards rationalisation is continuing with the Rolling Stock population now being reviewed.
- (mm) TfL accepts that a number of the standards covering telecommunications and data networks are out of date, which will also be reviewed in the coming year. In the meantime, output and performance based requirements are used to ensure that the most efficient modern solutions are procured.
- (nn) **Project Overheads (section 3.9):** Overheads are now more comprehensively captured, with most project staff using timesheets to record their costs. The overheads associated with central costs will continue to be apportioned on an estimated basis in order to estimate total project costs. Project managers are not able to influence central overheads.
- (oo) **Carbon Footprint (section 3.10):** Noted. The lessons learnt from the early trial of the carbon measurement tool will be implemented as soon as possible, including as part of the Pathway refresh project.

#### 4.4 Asset Management and Benchmarking (section 4):

- (a) Through the IIPAG's guidance, TfL has made considerable strides in developing the maturity of its benchmarking such that it is fully embedded across LU Operations and Capital Programmes, Buses, and Surface Transport Asset Management. It is also becoming progressively embedded across the entirety of Surface Transport. TfL is pleased to note the IIPAG's recognition of the progress made against the majority of its previous recommendations.
- (b) TfL's response to the IIPAG's four new recommendations is set out below.
- (c) **Recommendation 1:** The IIPAG recommends that TfL increases its focus on LU's "admin and other overheads" costs (i) clearly setting out its approach to reducing these costs (ii) setting itself challenging targets for reductions in costs and (iii) tracking and reporting on progress in cost reduction.
- (d) TfL accepts that 'admin and other overheads' costs have not reduced at the



same pace as other areas of the business, as reflected in the international KPI data quoted. Between 2013/14 and 2014/15 there has been a 10 per cent reduction in the cost of support services per car km. This has been achieved through a 4 per cent reduction in absolute costs, despite an increase in car km of 6 per cent. Efficiencies are regularly reported and reviewed through normal management processes and tracked at the Value & Sustainability Programme Board.

- (e) **Recommendation 2:** The IIPAG recommends that a comparison of actual and expected unit costs and the frontier shift of unit costs delivered by international metros be explicitly set out in LU's Asset Management Plans.
- (f) LU's asset management plans set out the actual and expected costs over the business plan period. TfL concurs with the IIPAG's view that these should be shown against the frontier shift of unit costs delivered by international metros and will introduce this in the 2015/16 Line, Asset and Network Plan.
- (g) **Recommendation 3:** The IIPAG reiterates its previous recommendation that TfL maintains its focus on delivering the anticipated reductions in track maintenance unit rates.
- (h) Track Maintenance unit rates remain a focus, with realising the benefits of the roll-out of Automatic Track Monitoring System (ATMS) one of the key enablers within this area to compliment the planned impact of track renewal and upgrade activity.
- (i) Attention to inspection frequency requirements (particularly patrols and ultrasonic inspections) as ATMS rolls out and track is progressively replaced is expected to drive down underlying costs when coupled with improvements in Wheel-Rail Interface management as part of LU's Predictive and Preventative maintenance programme.
- (j) **Recommendation 4:** The IIPAG reiterates its previous recommendation that TfL maintains its focus on delivering the anticipated reductions in train delays caused by staff.
- (k) As acknowledged, staff delays have reduced by 30 per cent since 2008/09 under this measure and have been on an improving trend for two years. Focus on further reducing train delays caused by staff remains strong, with local actions being identified and tracked for each line through Line Reliability Improvement Plans. These plans are reviewed at different summary levels (Operations Directorate and Chief Operating Officer) to identify key themes and share best practice activities across the network.
- (l) **Recommendation 5:** The IIPAG reiterates its previous recommendation that TfL maintains its focus on delivering the anticipated reductions in track renewals unit rate.
- (m) TfL continues to actively monitor unit cost performance within the Track Programme, and also through the efficiency database which is overseen by the Value & Sustainability Programme Board. Many actions to reduce the cost of track renewal are underway or planned. Examples include much more effective use of possessions by sharing with other projects reducing overall

costs; longer working windows in engineering hours allowing more work to be done; more delivery of modular Points and Crossings replacement and a procurement of a special train to allow more cost effective overnight ballasted track renewal.

- (n) **Recommendation 6:** The IIPAG recommends that TfL undertake a detailed comparison of the maintenance approaches used on the Jubilee line and those employed on the Victoria and Subsurface lines.
- (o) Joint forums under the “golden asset” banner have been established to identify common themes behind specific asset group’s performance including Fleet, Stations and Track. This will enable the sharing of best practices and reduction of unit costs.
- (p) **Recommendation 7:** The IIPAG recommends that TfL carefully consider the value for money of the Amey contract, taking into account the likely long term improvements in efficiency that such an internal comparator might deliver.
- (q) As the IIPAG notes, the contract costs a significant sum (including secondment fees). In considering the post-contract position, LU will carefully assess if the contract delivers value for money taking into account any benefit gained from having an internal comparator such as this.
- (r) **Recommendation 8:** The IIPAG reiterates its recommendation that costs of delivering Repeatable Work Items (RWIs) be consistently and regularly reported to the business, for example via Annual IARs.
- (s) Costs of RWIs in LU are regularly reported through the Estimating Book, which includes details of the cost drivers that influence RWI costs and key RWIs will be covered in the IARs.
- (t) **Recommendation 9:** The IIPAG reiterates its recommendation that RWI unit rates are carefully tracked to ensure that anticipated changes in unit rates due to changes in access are delivered.
- (u) Cost savings associated with access have been embedded into Capital Programmes Directorate Programmes and performance will be monitored regularly through normal management processes and through reporting of RWI costs in the Estimating Book as noted under recommendation 8 above, to ensure planned savings are achieved.

#### **List of appendices to this paper:**

Appendix 1 IIPAG Annual Report 2014/15

#### **List of background papers:**

None

Contact Officer: Steve Allen, Managing Director, Finance  
Number: 020 3054 8907  
Email: [SteveAllen@tfl.gov.uk](mailto:SteveAllen@tfl.gov.uk)