

## Finance and Policy Committee

Date: 25 November 2014

### Item 7: Review of the Assurance and Approval Processes applicable to Investment Projects

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**This paper will be considered in public**

## 1 Summary

- 1.1 The Committee established a Special Purpose Sub-Committee to review the KPMG Lessons Learnt Review of the Sub Surface Upgrade Programme Automatic Train Control contract, and management response, with a focus on the decision making and assurance processes.
- 1.2 The Sub-Committee wanted TfL to aspire to have a robust ‘best in class’ programme assurance process, led by the Programme Management Office (PMO). The Sub-Committee asked the Managing Director, Finance to commission a thorough benchmarking exercise to compare TfL’s programme assurance review process to its peers. This would include a review of who was involved in assurance reviews and the flexibility (scope, depth and frequency) of assurance processes in relation to the diversity of projects within TfL. The exercise would also seek to address the Independent Investment Programme Advisory Group’s (IIPAG’s) recommendation on strengthening the independence of the PMO.
- 1.3 This paper reports on the outcome of the benchmarking exercise and makes recommendations to strengthen the assurance function. This paper should be read in conjunction with the benchmarking report.
- 1.4 Appendix 1 to this paper is a version of the EC Harris benchmarking report with commercially sensitive information on comparator organisations redacted. The full paper is included on Part 2 of the agenda. It is exempt by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972 in that it concerns information relating to the business affairs of a person or authority.

## 2 Recommendation

- 2.1 **The Committee is asked to note and consider the findings and recommendations of the benchmarking report. Subject to any guidance given by the Committee, TfL will prepare a detailed delivery plan of proposed changes to assurance for the approval of the Committee at its next meeting.**

## 3 Background

- 3.1 An independent consultant (E C Harris) was commissioned to carry out the benchmarking and produce a report and recommendations. The report compares the assurance approach of TfL to a set of peer organisations delivering capital programmes in the transport and utilities sectors. The methodology, frequency,

capability, independence and outcome were considered for each peer, along with an assessment of the gap between TfL's approach and the best observed.

3.2 In addition, published academic guidance and assurance best practice from sources including the National Audit Office, Cabinet Office and Association for Project Management was reviewed.

3.3 A maturity assessment and best practice model was developed, and considered opportunities for TfL to match "best in class".

3.4 The benchmarking considered and compared the three lines of assurance/defence, as defined by the National Audit Office:

- (a) first line of defence: Typically provided by the project delivery organisation, staffed by the sponsor and delivery personnel either from within the project or from a peer project;
- (b) second line of defence: Typically provided by reviewers independent of the delivery organisation, but from within the same company. This role is fulfilled by the PMO at TfL; and
- (c) third line of defence: Typically provided by external reviewers, independent of the company. This role is fulfilled by the IIPAG at TfL.

## **4 The key findings**

4.1 The benchmarking exercise did not identify any major differences in the structure of TfL's approach compared to the peer group, but did reference a perception that the assurance activity carried out by TfL PMO (second line) may not be fully independent. The connection between the head of TfL PMO and the Rail and Underground Capital Programmes Directorate is cited as the reason for this. The structure does ensure separation of delivery from assurance but, for some observers, the existence of the connection in itself creates a compromise of independence.

4.2 Assurance regimes were viewed using a 'three lines of defence' approach where each line is further removed from programme delivery. In some peer organisations, the third line is a regulatory body over which the delivery organisation has no control e.g. Ofgem. In others, an independently appointed and run group of technical or business specialists is appointed and operates in conjunction with the delivery organisation but acts independently in the same way as TfL's IIPAG.

4.3 The benchmarking exercise also found best practice in peer organisations in relation to capability and approach that could be adopted by TfL. The findings are listed below.

4.4 Structure and lines of defence:

- (a) First and second lines of defence at TfL are in line with peer organisations and structured in line with best practice approach, as outlined by HM Treasury (Assurance Frameworks, 2012).
- (b) Independence of TfL's Project Assurance (and perception of its independence by others) is a key driver for TfL. Based on the existing TfL PMO structure,

Project Assurance is not fully independent, but it is separated from the delivery teams.

- (c) The third line of defence (IIPAG) is independent with respect to its reporting structure but not as truly independent as those bodies tasked with third line activity in peer organisations e.g. Ofgem, Office of Rail Regulation.
- (d) Second and third line reviews are producing complementary outputs for the same audience. In peer organisations with a similar assurance approach, reviews investigate different elements of the project and are issued to different audiences as appropriate.

#### 4.5 Capability

- (a) The TfL PMO Project Assurance team delivers an excellent administrative role as part of the Assurance Framework.
- (b) A lack of technical capability in the TfL PMO Project Assurance team leads to overreliance on External Experts and limited collaboration with other parts of TfL PMO (Centre of Excellence (CoE), Monitoring & Reporting).
- (c) High performing organisations have integrated assurance with other teams (e.g. Programme Controls, Continuous Improvement) ensuring a balance between assurance and performance improvement.

#### 4.6 Approach

- (a) TfL Project Assurance focuses on specific review points.
- (b) High performing peer organisations have established a continuous assurance approach at programme level that allows risk-based reviews and interventions of the Project Assurance as required.

## 5 Recommendations from the EC Harris Report

### 5.1 Structure and lines of defence:

- (a) In the short term maintain existing structure to be on a par with best practice and peers.
- (b) In the longer term enhance independence further and address concerns by assessing other structures and reporting lines.
- (c) Clarify roles and responsibilities and form an approach to any necessary change.
- (d) Ensure impact of other 'soft' changes e.g. continuous assurance are considered.

### 5.2 Capability:

- (a) Better integrate Assurance with Centre of Excellence and Monitoring and Reporting to enable a value adding approach.

- (b) Raise capability of the PMO Assurance team.
- (c) Technically competent resources to challenge project delivery teams and External Experts reports.

### 5.3 Approach:

- (a) Establish a continuous assurance approach.
- (b) Adopt a programme approach that connects project assurance to overall programme requirements.
- (c) Move from finance driven to a risk based model that develops assurance plans proportionate with the complexity of, and risks associated with the project.
- (d) Ensure knowledge sharing across different project delivery teams.

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

Appendix 1: TfL Assurance Benchmarking Report by EC Harris, dated 23 October 2014

The full EC Harris report, which contains exempt information, is enclosed on Part 2 of the agenda.

### **List of Background Papers:**

None.

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# Transport for London

## Assurance Benchmarking | Summary Report

23<sup>rd</sup> October 2014

# Executive Summary

- This benchmarking exercise was undertaken in response to a TfL Finance and Policy subcommittee instruction to strengthen the assurance function at TfL. The report compares the assurance approach of TfL to a set of peer organisations delivering capital programmes in the transport and utilities sectors. Elements of frequency, capability, independence and outcome were considered along with an assessment of the gap between TfL's approach at the best observed. Findings and recommendations from this exercise are listed later in this summary document.
- Assurance regimes were viewed using a 'three lines of defence' approach where each line is further removed from programme delivery. In some peer organisations, the third line is either a regulatory body over which the delivery organisation has no control e.g. OFGEM, or an independently appointed and run group of technical or business specialists appointed in conjunction with the delivery organisation but acting independently e.g. TfL's IIPAG.
- The benchmarking exercise did not discover any major differences in the structure of TfL's approach compared to the peer group. However there is a perception that assurance activity carried out by TfL PMO (second line) is not as independent as it could be. The connection between the head of TfL PMO and CPD Rail and Underground is cited as the reason for this. The structure does ensure separation of delivery from assurance but for some observers, the existence of the connection in itself creates a compromise of independence. To address this perceived lack of independence TfL have considered changing the reporting lines of the Assurance function.
- Our findings and recommendations suggest that first increasing the capability of the assurance team and redesigning the assurance regime would be preferable to an immediate structural change. Better integrated and more technically competent individuals carrying out risk based assurance on a continuous rather than an event or chronological basis. Not only would this approach reinforce faith in the independence of the PMO assurance function from delivery teams but it could also reduce dependence on IIPAG, TfL's independent assurance body, bringing their activities more in line with those of the regulatory bodies observed in peer organisations.
- The 'three lines of defence' approach is followed by all of the organisations in the study and should be retained by TfL which is notable for the political scrutiny attached to its capital programmes. Changes to the structure leading to the 'third line' being seen as anything other than an independent body could jeopardise the perceived transparency of TfL's delivery activity.

# The three lines of defence – mechanisms for assurance

Organisation	First Line – Delivery teams	Second Line – PMO or similar	Third Line – independent body or regulator
	Delivery Organisation via Pathway	TfL PMO – Project Assurance	Independent Investment Programme Advisory Group (IIPAG)
	Delivery team via GRIP lifecycle	Authority Submissions (technical) & Project Audit (process)	DfT/ORR
	Project Board; Sanctioning Committee	Assurance Management Function (Commercial, Design, Safety, Data)	OFGEM
	Delivery team via Gateway Lifecycle	PMO – Portfolio Assurance	Independent Fund Surveyor
	Delivery team via Stage Gate Assessment	Peer Reviews (Gateway Assessments)	DfT
	Delivery team via Performance assurance	Technical Assurance (technical) & Expert Panels (process)	DfT/TfL via Project Representative

# Summary findings

## ■ Structure and lines of defence

- First and second lines of defence at TfL are in line with peer organisations and structured in line with best practice approach as outlined by HM Treasury (*Assurance Frameworks, 2012*)
- Third line of defence (IIPAG) is independent with respect to its reporting structure but not as truly independent as those bodies tasked with third line activity in peer organisations e.g. Ofgem, ORR.
- Independence of the Project Assurance (and perception of its independence by others) is a key driver for TfL. Based on the existing TfL PMO structure Project Assurance is not fully independent but it is separated from the delivery teams.
- Second and third line reviews are producing complimentary outputs for the same audience. In peer organisations with a similar assurance approach, reviews investigate different elements of the project and are issued to different audiences as appropriate.

## ■ Capability

- TfL PMO Project Assurance team delivers an excellent administrative role as part of the Assurance Framework. A lack of technical capability in TfL PMO Project Assurance team leads to overreliance on External Experts and limited collaboration with other parts of TfL PMO (CoE, Monitoring & Reporting). High performing organisations have integrated assurance with other teams (e.g. Programme Controls, Continuous Improvement) ensuring a balance between assurance and performance improvement.

## ■ Approach

- TfL Project Assurance focuses on specific review points of projects. High performing peer organisations have established a continuous assurance approach at programme level that allows risk-based reviews and interventions of the Project Assurance as required.

# Recommendations

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## ■ Structure and lines of defence

- In **short term** maintain existing structure to be on a par with best practice and peers
- In **longer term** enhance independence further and address concerns by assessing other structures and reporting lines
- Clarify roles and responsibilities and form approach to any necessary change
- Ensure impact of other ‘soft’ changes e.g. continuous assurance are considered

## ■ Capability

- **Better integrate** Assurance with CoE and Monitoring & Reporting to enable a value adding approach
- Raise capability of the PMO Project Assurance team
- **Technically competent** resources to challenge project delivery teams and External Experts’ reports

## ■ Approach

- Establish a **continuous assurance** approach
- Adopt a **programme approach** that connects project assurance to overall programme requirement
- Move from finance driven to a **risk based** model that develops assurance plans proportionate with the complexity of, and risks associated with the project
- Ensure **knowledge sharing** across different project delivery teams

# Transport for London

## Assurance Benchmarking

23<sup>rd</sup> October 2014

# Contents

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1. Summary findings and recommendations
2. Context and benchmarking approach
3. Current trends
4. Summary of peer organisations
5. TfL compared to peers in key assurance areas
6. Findings and recommendations

# Summary findings

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# Context and benchmarking approach

Events leading to the creation of this report

Our approach and principles

Developing the Maturity Model tailored to project requirements

Peer organisations

# Following issues with the SUP contract, reviews and reports were undertaken

In July 2014 the Finance and Policy committee of TfL considered papers on the Lessons Learned Review for the Sub-Surface Upgrade Programme (SUP) Automatic Train Control contract and the Annual Report of the Independent Investment Programme Advisory Group (IIPAG).

Both papers made reference to the processes employed by TfL in assuring investment projects, and both made recommendations to strengthen these. This was followed by the establishment of a Sub-Committee to investigate existing assurance framework and compare it with those of other organisations.



# IIPAG annual report made a number of recommendations

## IIPAG concluded that:

- The existing structure of dual reporting lines to the Managing Finance Director and the Rail & Underground Capital Projects Director jeopardises the internal Assurance role of the PMO
- TfL as a whole would benefit from a greater focus on 'cost', value and contractual matters.
- The performance by EEs is variable. The PMO has a responsibility to ensure that the EE is only engaged when appropriate, that their brief addresses the specific risks a project presents, and that competent individuals are deployed.

## IIPAG recommended that:

- The Assurance function should be strengthened, separated from the PMO and directly responsible to the Managing Director Finance. IIPAG agrees with external companies that separation will demonstrate full independence of the Assurance function
- The Centre of Excellence should operate as an internal consultancy on project management
- Reporting should be delegated to the Projects as far as possible.
- Consideration should be given to the creation of a Commercial Secretariat or a Consultancy Group to review the commercial aspects of systems embracing business benefits, best value procurement, existing standards, cost management of change, cost control and cost reporting.



*The Finance and Policy Committee noted the IIPAG's Annual Report for 2013/14 and endorsed TfL's management response, for approval by the Mayor*

# KPMG conducted a lessons learned exercise on the SUP contract

## KPMG concluded that:

- The quality of programme and commercial assurance framework adopted did not reflect the scale of risk of the programme and did not portray the necessary independent and direct reporting to the most senior level.
- Assurance interventions should have occurred earlier in the programme, with a detailed focus on key risks.

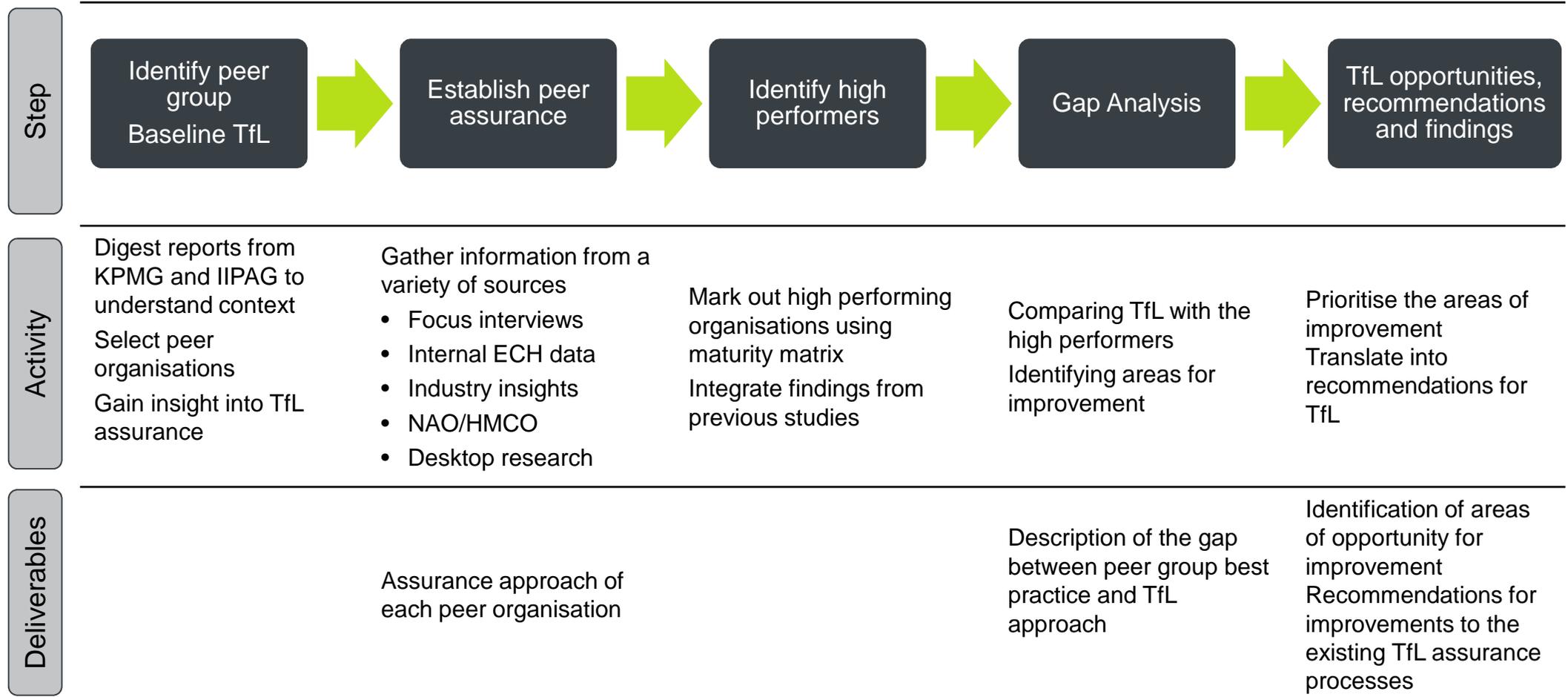
## KPMG recommended that:

- For programmes that delivers significant investment sums and/or key strategic objectives a more effective and independent assurance framework should be applied, including:
  - Programme specific regular reviews and holding the investment owner accountable.
  - Services of specialised external experts employed to support the PMO and fulfil the technical aspect of their duties
  - Transparency and board level accountability for key strategic decisions that affect the programme plan and investment risk profile



*London Underground has responded that further layers of assurance would be counter-productive and so the focus is on enhancing the quality and capability of the assurance and oversight functions.*

# Our approach follows 5 stages of data collection, analysis and recommendations



# Principles of this benchmarking study

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This exercise will benchmark TfL assurance processes against those of peer organisations. This will provide TfL with insight into the approach taken by others and identify areas of improvement for the existing process.

## ■ This study is...

- A comparison of TfL Investment Programme assurance against peer organisations to provide a point of view on potential areas for improvement for TfL.
- Evidence based and objective.

## ■ This study isn't...

- A relative ranking of TfL and peer organisations assurance processes
- An assessment of the performance of individual functions carried out within the TfL Assurance process

# Approach – Deliverables linked to data collection

## Deliverables

## Themes & Inputs

## Information from interviews and data

Assurance approach of each peer organisation

### Framework

- Governance Policy
- TfL PMO Assurance Annual Report
- IIPAG Annual Report
- Project Assurance layers
- Assurance Process
- Assurance Principles

Description of the gap between peer group best practice and TfL approach

### ▪ Involvement

- Regulatory Requirements
- Authority Submissions
- Authority Levels
- Approvals matrix
- Org Charts
- RACI
- Thresholds
- Escalation routes
- 3<sup>rd</sup> parties

### ▪ Frequency

- Assurance Plan
- Performance Trackers
- Terms of Reference
- Total value of projects
- # Reviews per project
- Assurance Org. Chart
- Job Descriptions
- Integrated Assurance & Approval Strategy
- Statements of requirements

### ▪ Capability

Identification of areas of opportunity for improvement

### ▪ Outcome

- Review reports
- Authority submissions rejected
- Benefits Realisation
- Key areas of success/failure
- Lessons Learned Reports
- Proportion of projects delivered on time, budget and quality

Recommendations for improvements to the existing TfL assurance processes

### Literature Review and case studies

- Infrastructure UK
- Major Projects Association
- EC Harris Strategic Research
- National Audit Office
- EC Harris client case studies
- Academic Resources
- Managing Successful Programmes
- P3M3
- Association for Project Management
- Major Projects Authority

# Analysis is based on industry best practice and bespoke tools

## ■ Maturity Assessment Model

- Tailored to TfL Assurance Benchmarking project brief
- Drawn from EC Harris intelligence
- Based on well recognised models (e.g. P3M3, APM)

## ■ National Audit Office

- Major Projects Authority Assurance for high risk projects

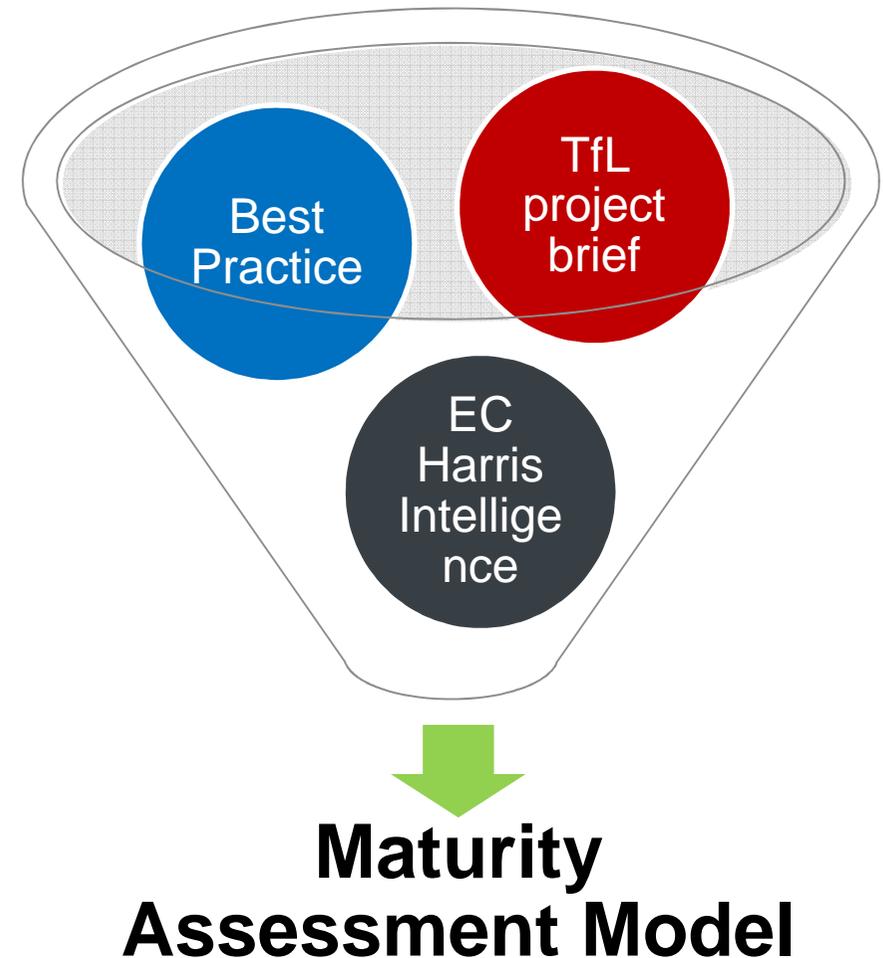
## ■ HM Treasury – Cabinet Office

- Major Project approval and assurance guidance
- Integrated Assurance and Approvals
- Assurance Frameworks

HM TREASURY		CabinetOffice		
Key Areas	Underperforming	Fit for purpose	Value Added	World Class
Assurance Plan	1. The Assurance plan simply sets out when reviews will take place.	1. The project assurance plan identifies the programme outputs which will provide evidence of performance - the frequency of audits, inspection, testing and commissioning requirements - how non-conformances will be closed out, - the quality of data needed, how it will be logged and analysed. 2. Assurance reviews take place on either time or event basis. These are not integrated with other activities	1. The assurance plan - defines the outputs which will provide evidence in support of quality performance, and also the evolution of quality influences throughout the project lifecycle from inception, through procurement, design & construction to handover, and defines review activity and criteria accordingly. 2. How data will be collected, verified, analysed and used to identify trends, working backwards from the end goal. - the frequency of and trigger points for audits, inspection, testing and commissioning requirements 3. How non-conformances will be closed out 2. Independent and integrated reviews take place according to a carefully considered timetable. Reviews are: - Linked to major decision points - Risk-based - Action and intervention-based	As 2, plus 1. The assurance plan links to the organisation's values, strategy and risk appetite 2. The plan sets out specifically how this activity will work to foster a culture of assurance and continuous improvement
Independent Assurance Regime	1. Does not meet the criteria for performance level 1.	1. There is a regime for milestone reviews in order to ensure project assurance. 2. There are basic standards in place against which the programme should be tested. However, the detail is limited.	1. There is an independent audit regime in place for all programmes which includes milestone reviews, calendar review and event-based reviews. The situations in which a review should take place are clearly documented. 2. There are detailed standards in place, defined centrally by the organisations assurance function (or equivalent) against which programmes should be audited. 1. The organisation has a proactive assurance process to assure business case products (cost, schedule, benefits) in between gate reviews to promote a no surprises approach.	1. There is an organisational audit strategy from which all audit regimes are derived. There are clear organisational standards - linked clearly back to the organisational strategy - governing when and how reviews should take place. 2. The standards against which programmes are audited have been derived in partnership with programme teams across the organisation, and have the level of detail (which may include variations for different events or contexts) that has been seen to be required in order to balance a culture of improvement with external assurance.
Reviewing Investment decision	1. No formal process for review and control of projects, programmes and portfolios.	1. Have a clear financial governance process to assure the programme outcomes / business case objectives (these include cost, schedule, risk, benefits etc.) 2. Align governance levels with project work stages / gateways. This includes investment decisions stage gate reviews, challenge the viability of the investment. Stage gate reviews include the following activities: - Assurance of the Business Case Products (Cost, Schedule, Risk, Benefits) - Clear specific risk studies (political, security, community, regulatory, resources etc.) - Cost and schedule peer reviews, IBR - Benefits testing and validation - Contingency analysis - Operational readiness reviews - Investment committee studies and reports - Vendor qualification analysis - Internal control audits - Independent project assurance. 3. Detailed delegation of authorities.	As 1, plus: 1. There is a business-wide process for ensuring consistency in the standards against which the investment decision is reviewed and the processes used to do so 2. Financial and commercial governance processes are well embedded and consistently applied across the programme. 3. Aligned financial and commercial governance processes with wider programme governance including electronic 4. Proactive liaison with governing bodies, regulators / 3rd parties to ensure they are getting the required transparency. 5. The outcome of each Gateway Review is comprehensively reviewed by the project team and corrective or abortive action is undertaken if and when necessary. 6. Evidence of projects being reviewed if their business cases no longer valid.	As 1, plus: 1. Business cases reviewed at each stage gate and based on updated information to make decisions (Benefits, Financial case, Risk). 2. The standards against which the investment decision is reviewed are directly linked to the organisation's strategic vision and goals 3. Key success factors are monitored across projects & programmes throughout work stages and gateways to establish benchmark metrics to measure and set the bar for future projects and programmes. 4. Lessons learnt from past experience, incorporated into the governance process as part of a continuous improvement cycle. 5. Continuous improvement is applied to the process of reviewing the investment decision.

# We developed a maturity assessment model tailored to the specific requirements of this project

- For the purposes of this benchmarking exercise a **Maturity Assessment Model** was developed. This is tailored to TfL project brief and relevant to the specific exercise only.
- Based on **Best Practice** assurance approach, identified through academic resources (e.g. MSP), **EC Harris client case studies** and past experiences, all core elements of assurance were considered. These elements were assessed against the **TfL project brief**, and a final list of key elements of assurance was extracted.
- TfL and peer organisations were then assessed using this list of assurance elements, keeping the exercise specific to the brief provided by TfL.
- This particular maturity assessment model provides a **robust and evidence-based** analysis of the organisations' assurance performance.



# The maturity assessment covers key elements of the assurance

- Following a review of best practice assurance approaches (P3M3, MSP, APM, EC Harris intelligence) all elements constituting assurance frameworks were evaluated against the TfL project brief requirements. For the purposes of this exercise a list of key elements of assurance was extracted.

Key elements	Description
<b>Assurance plan</b>	Documentation to outline the planning, implementation, and assessment processes and procedures for a particular project
<b>Independent assurance regime</b>	Provision of independent assurance as part of the organisation's assurance framework
<b>Reviewing investment decision</b>	Reviewing and challenging business cases and viability of investment decision against standards linked to organisation's strategic vision and goals
<b>Benefits realisation</b>	Ensuring that potential benefits arising from a project are actually realised
<b>Monitoring benefits</b>	Identification, definition, tracking, and measurement of benefits throughout project delivery
<b>Escalation routes</b>	Process to identify and communicate issues and risks in a particular project
<b>Capturing information</b>	Mechanisms to capture project information including best practice examples and lessons learned based on clearly defined requirements
<b>Continuous improvement</b>	Culture of striving to improve ways of working based on lessons learned captured
<b>Performance management</b>	Mechanism to measure project performance and the success of the continuous improvement efforts

- TfL and other peers' assurance approaches have been evidence-based assessed against these key elements based on clearly defined maturity levels.

# Peers were selected from a cross section of transportation and utilities organisations

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Organisation logos removed

- **Focus Interviews and Discussions**
  - With representatives of TfL PMO, IIPAG and other organisations' Assurance teams
- **EC Harris client intelligence**
  - Intelligence from account teams, heads of client service and sector leaders
- **EC Harris Strategic Research insights**
  - Macro-economic and market conditions insights
- **Desktop research**
  - Regulatory, Media coverage, Industry publications, Working groups and Professional bodies

# Current trends

Role of Governance vs. Assurance

Discussing assurance benefits

Government frameworks and best practice

# It is important to appreciate the differences between governance and assurance

**Project governance** is the management framework within which project decisions are made. The role of project governance is to provide a decision making framework that is logical, robust and repeatable to govern an organisation's capital investments.

- APM Body of Knowledge

## Governance

**Project governance** is the management framework set up for a project within which ongoing assurance can take place, and provides the targets for assurance to check against.

- National Audit Office "Assurance for high risk projects"

**Project assurance** is periodically checking that governance mechanisms are being applied and the governance framework is achieving its objectives.

- National Audit Office "Assurance for high risk projects"

## Assurance

**Project assurance** is a specialised discipline and practice involving independent and objective oversight, specialised experience and audit skill sets to assess risk, finance, accounting, compliance, safety and performance for any major capital expenditure or infrastructure investment.

- APM Body of Knowledge

The role of **assurance** is to provide information to those that sponsor, govern or manage a project to help them make better informed decisions which reduce the causes of project failure, promote the conditions for success and deliver improved outcomes"

- APM Body of Knowledge.

# Assurance can provide the appropriate visibility of project performance

## Assurance is:

- An independent view of how the project is progressing
- An independent assessment of whether the elements fundamental to successful project delivery are in place and operating effectively.

## It helps identify and mitigate risks by assessing:

- Project sponsorship
- Business case
- Benefits plan
- Governance and reporting arrangements
- Contracting and supply chain strategies
- Commercial and delivery skills
- Funding and resourcing
- Overall project management approach

## Assurance falls into three types:

1. **Business assurance** - checking that the project remains viable in terms of cost and benefits
2. **User assurance** - checking that users requirements are met
3. **Specialist/technical assurance** - ensuring the project is delivering a viable solution.

## Visibility of project performance key:

- Government regulated projects are frequently large scale, innovative and reliant on complex relationships between diverse stakeholders. Improved visibility of project performance, tracked at portfolio level, should lead to better decisions across projects and departments. It is a way to transfer knowledge/ lessons across projects.
- Whilst difficult to quantify, there is evidence that it is beneficial to individual projects. For example, the NAO estimated that if assurance contributed to just a 10% reduction in the MoD's 2010's projected cost overrun, it would have yielded a saving of approximately £500 million.

# Assurance can highlight breaches of time, cost and quality control and trigger appropriate intervention

National Audit Office lead on sharing best practice principles, developed in collaboration with the public and private sectors. Best practice shows that assurance should:

- **Test defined control limits** for each project are appropriate
- **Highlight compliance to the control limits** e.g. exceeding or in danger of exceeding time/ cost/ quality and scope
- Enable **manage by exception**: acting as a **trigger for interventions** if projects exceed agreed control limits
- Be **outcome focused**, not activity focused and should **assure the benefits** of projects, not the projects themselves
- Take place at the earliest opportunity to establish clear **criteria for identifying and measuring elements** in the project which are uncertain and turning them into understood **areas of risk**, which have a value placed on them
- Ensure there is a justifiable reason to start and that project business case **justification** is **documented** and **approved**
- **Inform the assessment** of project status at defined control points
- Include 'point-in-time' and 'continuous' assurance
- **Inform portfolio investment decisions** using forecast expenditure and deliverability
- **Inform initial approval** of projects and decisions on ongoing funding
- Act as a primary method for **transferring learning** between projects and developing an **understanding of any systemic issues** affecting the delivery of a portfolio

# Assurance should run throughout the project lifecycle

## Plan

**Objective:** to produce a clear plan for assuring major and high risk projects that is based on assessment of project priority and which is appropriately funded and resourced.

### Principles:

- Assurance activity should be prioritised
- All projects should be subject to the same assurance
- Assurance should commence as soon as possible
- The skills and experience of the reviewers is key

## Perform

**Objective:** To execute point in time and continuous assurance in order to provide those who sponsor, govern and manage projects with information to inform their decisions and reduce the variance of project performance against the business case.

### Principles:

- Should help Accounting Officers discharge their financial obligations
- Reviewers must report directly and independently to the top of the organization
- Reviewers must use all available information
- Evidence needs to be quantitative
- Assurance findings should include clear responsibility for action

## Control

**Objective:** to decide how to act on the information received from individual assurance activities or consolidated reports within an agreed governance structure

### Principles:

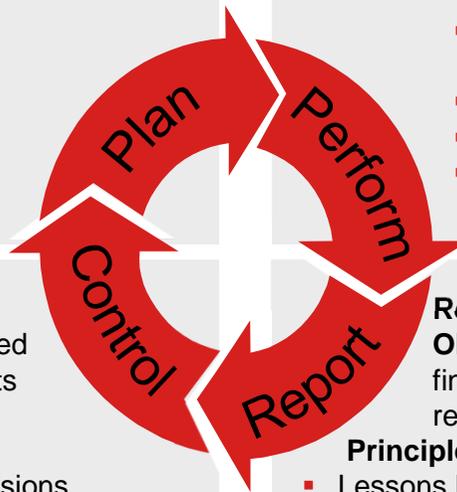
- Should be linked to initial approval of projects and decisions on ongoing funding
- Pre-agreed escalation routes should be followed when issues raised
- If a project is deemed currently undeliverable this should force a clear business decision to continue or otherwise
- There must be clear separation between assurance and interventions
- There are clear control limits to trigger escalation

## Report

**Objective:** to take the output of assurance and report financial and deliverability status, report lessons learned and report areas where the assurance system can be improved.

### Principles:

- Lessons learned are captured, analysed and shared in a routine and systematic manner across the organisation
- Assurance has the authority to report directly and independently to the highest levels
- The impact of assurance is assessed as part of the reporting process
- Project knowledge is captured in a systematic way
- Information in reports is tailored to the audience, communicate only what the stakeholder needs to see



# Integrated assurance and approval is the planning, coordination and provision of assurance activities

## Planned assurance

- Risk potential assessment (RPA) form identifies level and nature of project risk and therefore degree of assurance required
- Starting gate review explores deliverability of major new policy and/or business change initiatives prior to public commitment to project
- OGB Gateway Review are a series of assurance “gates” before key project milestones
- Project Assessment Review (PAR) is a flexible assurance review that is tailored to the stage of the project

## Consequential Assurance

- Assurance of action plans (AAP) provides assessment of whether projects action plans are sufficient to resolve issues identified through planned assurance
- Project assessment review (PAR) tailored to deep dive into known issue areas and support recovery plans
- Applied support is the provision of capability from organisation in support of recovery
- Managed Early Closure (MEC) supports controlled and timely termination of projects
- Escalation is the timely engagement with higher levels of management to resolve otherwise intractable problems

## The Major Projects Authority (MPA)

The UK MPA aims to improve project performance. It reviews and approves integrated assurance and approval plans for each major project regulated by the government.

It provides an integrated assurance toolkit for departments to use. Every project is required to prepare an integrated assurance and approval plan (IAAP) indicating how assurance reviews of all types will be scheduled to support decision making and inform approvals by department and Treasury, while avoiding duplication or activity that does not add value.

It provides structure for risk-based, proportionate and fit for purpose assurance provision for major projects. All IAAPs must include both planned assurance tools and consequential assurance.

# Summary of peer organisations

The Summary of peer organisations section outlines the approach of TfL Assurance and the peer organisations based on the following structure:

- Graphical representation of lines of defence
- Description of the Assurance approach in areas
  - Frequency
  - Capability
  - Involvement
  - Outcome
- Further details on the assurance approach of each of the organisations can be found in Appendix I

# The Three Lines of Defence

For the purposes of this exercise the different layers of Project Assurance delivered by TfL and peer organisations are structured in three lines of defence. The table below summarises the key characteristics for each of these lines of defence.

Project Assurance	Characteristics
1 <sup>st</sup> Line of Defence	<ul style="list-style-type: none"><li>• Delivery teams</li><li>• Project Manager or Sponsor ownership</li><li>• Project assurance or specific technical assurance</li><li>• Follows a specified process e.g. GRIP, Pathway etc.</li></ul>
2 <sup>nd</sup> Line of Defence	<ul style="list-style-type: none"><li>• Separated from Delivery teams</li><li>• PMO or central team – process based</li><li>• Not technical so occasionally uses external experts</li><li>• Not independent due to structural connections i.e. same organisation</li></ul>
3 <sup>rd</sup> Line of Defence	<ul style="list-style-type: none"><li>• Independent</li><li>• Regulatory bodies (or appointed by regulatory bodies)</li><li>• Content experts OR process experts</li><li>• Usually a board or group structure</li></ul>

# Assurance Framework



## 1<sup>st</sup> Line of Defence

### Delivery Organisation



Sponsor (Lead), TfL Project Team and Suppliers



TfL Pathway – Stage Gate or Peers Review



Review of the stage's products and progress to the next stage

## 2<sup>nd</sup> Line of Defence

### PMO Assurance



PMO (Lead), External Experts (EE) or Peers outside the delivery organisation



Integrated Assurance Reviews



EE Interim Report and PMO Assurance Final Report

## 3<sup>rd</sup> Line of Defence \*

### IIPAG



PMO (Lead), IIPAG External Experts (EE) or Peers outside the delivery organisation



Integrated Assurance Reviews and Interim Reviews



EE Interim Report, PMO Assurance Final Report and IIPAG Final Report

\* The 3<sup>rd</sup> Line of Defence applies for complex projects with EFC over £50m

# Assurance Framework

TfL Project Assurance structure is aligned with the three lines of defence outlined by the TfL Integrated Assurance Framework. This ensures that all projects will be assessed sufficiently in line with their complexity and project value.

However, a question raised relates to key elements of Project Assurance as per the frequency of the reviews, the capability of the teams, the involvement of the assurance parties, and the output of these reviews.

## ■ Frequency

The frequency of the reviews is considered sufficient given the Gateway and Interim reviews. Major projects are reviewed regularly, typically every six months during the implementation phase, by IIPAG. This ensures that any risks will be identified early. Also, the process is well designed to minimise any disruption to the project delivery works.

## ■ Capability

As part of the 2<sup>nd</sup> and 3<sup>rd</sup> lines of defence, PMO Project Assurance instructs External Experts (EEs) or Peers to review the project delivery teams. The role of PMO Project Assurance is mainly administrative. There is a lack of technical capability in the team. It has been agreed that the Assurance team could raise their technical capability checking compliance of project delivery teams. IIPAG is considered a team of very experienced professionals who can identify issues and risks in the delivery of a project.

## ■ Involvement

IIPAG was established in 2010, and since then it's role has evolved reflecting corporate requirements and the maturing of the TfL/IIPAG relationship. Initially IIPAG principally concentrated on project management within the capital programme. More recently IIPAG's focus has developed from the delivery of that programme to the preparation and delivery of a new Investment Programme instigated by TfL in line with the Mayor's Transportation Strategy.



# Assurance Framework

Alongside PMO Project Assurance, IIPAG focuses on gateway reviews of projects with a value greater than £50m, when these projects request Project Authority to proceed. IIPAG's review is based on the report produced by the External Expert (appointed by PMO Project Assurance) and the Gate Review Meeting, attended by the project delivery team and the External Expert, and chaired by PMO Project Assurance.

IIPAG carries out interim reviews for major projects (typically every 6 months). These are mainly independent and separated from the PMO Project Assurance.

## ■ Outcome

Although the assurance process is integrated enough to avoid any duplication of effort during the reviews, it was noticed that the output of the process (in major projects when IIPAG is involved) includes two separate reports based on the same source of information. Both reports have the same audience. Typically these two reports agree on the findings and recommendations made following the review.

# Assurance Framework

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# Summary of approaches from peer organisations

Organisation	Frequency	Capability	Involvement	Outcome
	<p>At the end of every project stage in line with TfL Pathway            Every 12 months if a project stage is planned to last more than a year            Prior to seeking investment authorisation to move into the next phase</p>	<p>In-house administrative PMO Project Assurance team            External Experts or Peers deployed for the reviews            Senior experienced independent Assurance (IIPAG) for major projects</p>	<p>IIPAG is involved for major projects typically with EFC above £50m</p>	<p>Pass to the next stage for Stage Gate Reviews            Separate reports by PMO Project Assurance and IIPAG for Integrated Assurance Reviews</p>
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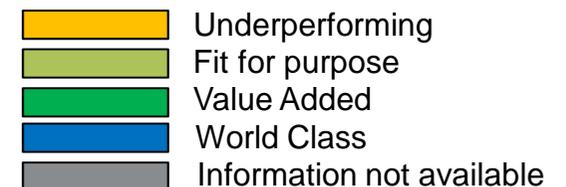
## TfL compared to peers in key assurance areas

Using the Maturity Matrix, key assurance areas from the peer organisations were assessed and the best observed approaches compared with TfL

Areas for improvement emerged and the gap between high performing peer organisations and TfL approach was reviewed

# The Maturity Matrix was used to assess key elements of assurance

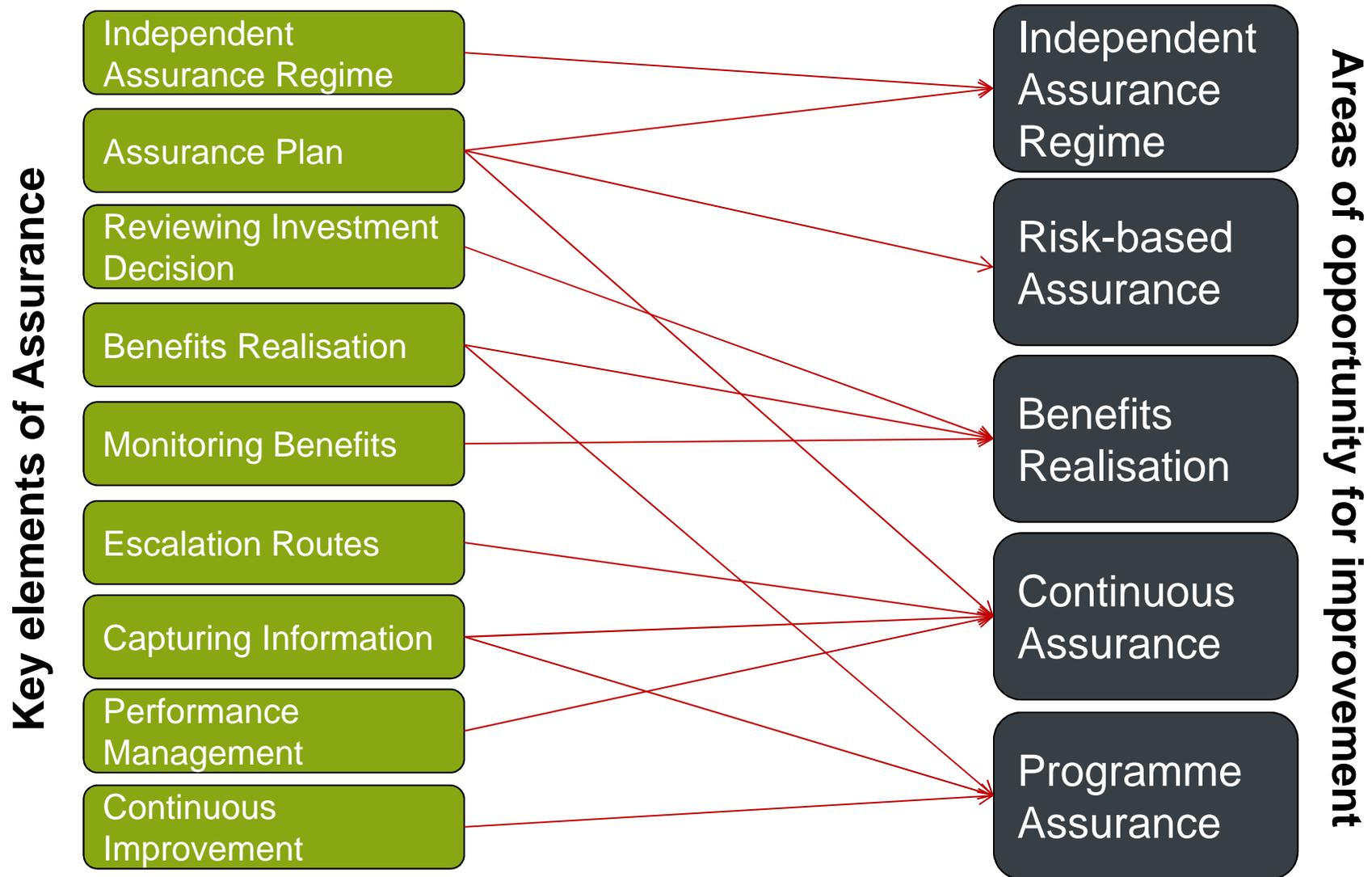
Key elements	TfL					
Assurance plan	Fit for purpose	Fit for purpose	Value Added	Value Added	Fit for purpose	Value Added
Independent assurance regime	Value Added	Fit for purpose	Value Added	Value Added	Fit for purpose	Value Added
Reviewing investment decision	Value Added	Fit for purpose	Value Added	Value Added	Fit for purpose	Information not available
Benefits realisation	Underperforming	Underperforming	Information not available	Value Added	Value Added	Information not available
Monitoring benefits	Fit for purpose	Underperforming	Value Added	Value Added	Value Added	Information not available
Escalation routes	Fit for purpose	Fit for purpose	Value Added	Fit for purpose	Value Added	Information not available
Capturing information	Fit for purpose	Value Added	Value Added	World Class	Value Added	Value Added
Continuous improvement	Fit for purpose	Fit for purpose	Fit for purpose	Fit for purpose	Information not available	Value Added
Performance management	Fit for purpose	Value Added	Value Added	Value Added	Fit for purpose	Value Added

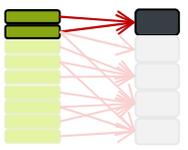


# The TfL approach is compared to the best observed and a gap is identified

Key elements	TfL	Best Observed	Additional evidence identified in best observed
Assurance plan	Fit for purpose	Value Added	<ul style="list-style-type: none"> <li>- Assurance Plans linked to the organisation's strategy and values.</li> <li>- Continuous assurance and risk-based approach for effective intervention and reviews of projects as required.</li> </ul>
Independent assurance regime	Value Added	Value Added	<ul style="list-style-type: none"> <li>- Organisational assurance strategy and standards derived in partnership with the project delivery teams</li> </ul>
Reviewing investment decision	Value Added	Value Added	<ul style="list-style-type: none"> <li>- Standards against which investment decisions are reviewed linked to organisation's strategy</li> <li>- Lessons learned feeding into the governance and future business cases, and a continuous improvement culture for the reviewing of investment decisions</li> </ul>
Benefits realisation	Underperforming	Value Added	<ul style="list-style-type: none"> <li>- Risks to benefits identified</li> <li>- Benefits optimisation a key consideration in the opportunity management process</li> <li>- Benefits realisation at programme level</li> </ul>
Monitoring benefits	Fit for purpose	Value Added	<ul style="list-style-type: none"> <li>- A benefits management plan maintained at programme level</li> <li>- Governance reviews clearly linked to benefits</li> <li>- Opportunities for the delivery of additional benefits managed and prioritised</li> </ul>
Escalation routes	Fit for purpose	Value Added	<ul style="list-style-type: none"> <li>- Escalation process are efficient and not repeated</li> </ul>
Capturing information	Fit for purpose	World Class	<ul style="list-style-type: none"> <li>- Requirements regarding data to be captured during project delivery</li> <li>- Lessons learned and examples of good practice at programme level</li> <li>- Organisation- wide performance measures linked to continuous improvement whose success can be measured and evidenced by improved business activity and output</li> </ul>
Continuous improvement	Fit for purpose	Value Added	<ul style="list-style-type: none"> <li>- A culture of continuous improvement across the project delivery teams</li> <li>- Assurance support of the continuous improvement through lessons learned and good practice</li> </ul>
Performance management	Fit for purpose	Value Added	<ul style="list-style-type: none"> <li>- Performance measures and standards linked to continuous improvement process and evidenced by clearly defined outputs</li> </ul>

# The key elements map to five areas of opportunity for improvement

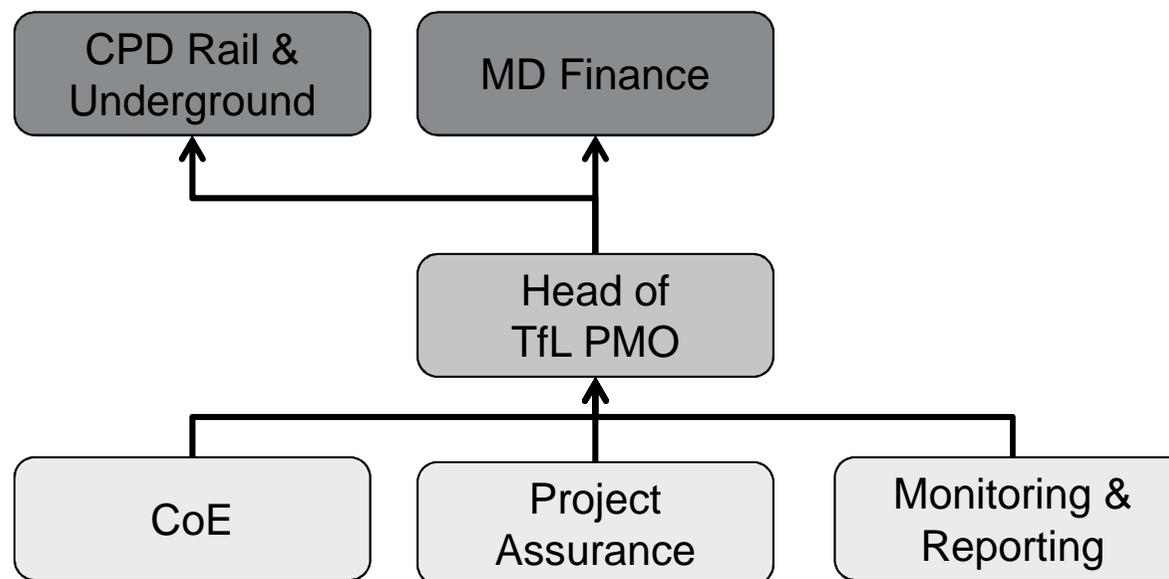




# Independent Assurance Regime

One of the key principles outlined by the NAO is the independence of Assurance. To be independent, assurance should be funded independently of the project.

- A question raised relates to the appropriateness for PMO Project Assurance to sit within the TfL PMO. This was raised at the latest IIPAG Annual Report, highlighting that *“the existing structure with its dual reporting lines to the Managing Director, Finance of TfL and the Rail & Underground Capital Projects Director was not appropriate as it jeopardised the internal Assurance role of the PMO.”*
- Based on the review of the assurance approach at TfL and other peers, and consultation with key stakeholders it was investigated whether PMO Project Assurance team would be more effective if it was a separate function reporting to the TfL MD Finance directly.
- The existing structure at TfL is shown below.

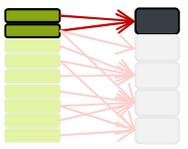


# Independent Assurance Regime



- The 1<sup>st</sup> and 2<sup>nd</sup> lines of defence are consistent with best practice. However there are areas of improvement in the way assurance is delivered.
- The 3<sup>rd</sup> line of defence (IIPAG) operates in a different way compared with the respective bodies of assurance in peers organisations. IIPAG reviews projects mainly alongside PMO Project Assurance team. The independent report produced is based on the External Expert's report (appointed by PMO Project Assurance) and the findings identified in the Gate Review Meeting. The respective bodies constituting the 3<sup>rd</sup> line of defence in peer organisations carry out independent reviews separated from the other lines of defence. Their approach is more similar to IIPAG's approach in interim reviews. IIPAG carries out independent interim reviews separated from PMO Project Assurance team. IIPAG interviews different stakeholders from the project delivery team in the interim reviews.
- PMO Project Assurance sets the 2<sup>nd</sup> line of defence. Based on the Assurance Frameworks guidance (*Assurance Frameworks, HM Treasury, 2012*) the 2<sup>nd</sup> line of defence is separated from those responsible for delivery, but not independent of the organisation's management chain. The 3<sup>rd</sup> line of defence relates to independent and more objective assurance. This is reflected by IIPAG's role on the TfL Project Assurance framework.
- IIPAG plays a critical role in the assurance of major projects based on the existing framework. The Independence Assurance Regime is achieved by IIPAG. IIPAG works collaboratively with the PMO Project Assurance and prepares its own independent report.

# Independent Assurance Regime



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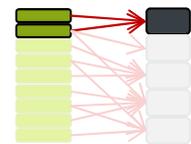
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# Independent Assurance Regime – Options for TfL



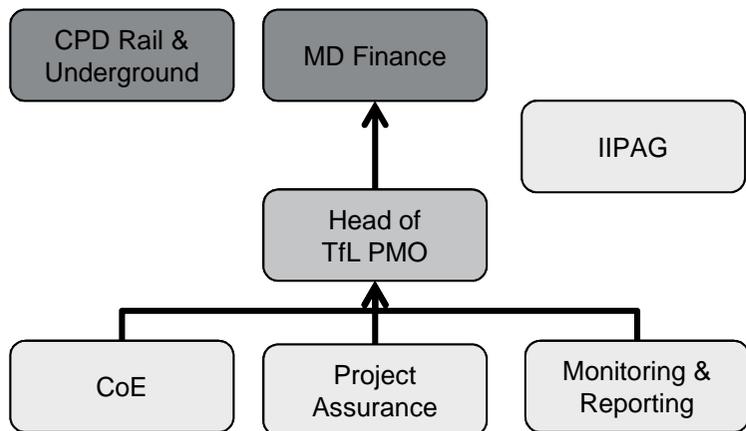
Options	Description	Benefits	Risks
<p>1</p> <pre> graph TD     CPD[CPD Rail &amp; Underground] --&gt; HTPMO[Head of TfL PMO]     MD[MD Finance] --&gt; HTPMO     HTPMO --&gt; CoE[CoE]     HTPMO --&gt; PA[Project Assurance]     HTPMO --&gt; MR[Monitoring &amp; Reporting]     IIPAG[IIPAG]         </pre>	<p>Organisational Structure is maintained. Project Assurance reports to the Head of TfL PMO and IIPAG reviews independently.</p>	<ol style="list-style-type: none"> <li>1. Alignment with peers' structure</li> <li>2. Alignment with three lines of defence model outlined by HM Treasury Assurance Frameworks</li> <li>3. Integrated PMO function</li> <li>4. Stable platform to develop other elements of Assurance, e.g. Knowledge Share, Continuous Assurance, etc.</li> </ol>	<ol style="list-style-type: none"> <li>1. Project Assurance separated but not independent from the delivery</li> <li>2. TfL PMO seen as a primarily Assurance function reviewing projects</li> <li>3. At odds with IIPAG recommendations</li> <li>4. Project Assurance reliance's on CoE and Monitoring &amp; Reporting for other elements of Assurance</li> </ol>
<p>2</p> <pre> graph TD     CPD[CPD Rail &amp; Underground] --&gt; HTPMO[Head of TfL PMO]     MD[MD Finance] --&gt; HTPMO     HTPMO --&gt; CoE[CoE]     HTPMO --&gt; MR[Monitoring &amp; Reporting]     PA[Project Assurance] --&gt; MD     IIPAG[IIPAG]         </pre>	<p>Project Assurance team separated from PMO and reports solely to MD Finance; IIPAG reviews independently</p>	<ol style="list-style-type: none"> <li>1. Fully independent Project Assurance</li> <li>2. Perception across delivery teams of a more credible external assurance provided by both Project Assurance and IIPAG</li> <li>3. Project Assurance able to escalate issues, risks directly to MD Finance</li> </ol>	<ol style="list-style-type: none"> <li>1. Project Assurance lacking the technical capability to apply continuous assurance as appropriate</li> <li>2. Overlap between Project Assurance and IIPAG in reviews of major projects</li> <li>3. Project Assurance becomes isolated and detached from Monitoring &amp; Reporting and CoE. Risks, issues are not early identified, and lessons learned and good practices are not effectively communicated</li> <li>4. TfL PMO lacking oversight on project delivery teams performance and assurance reviews' results</li> </ol>

# Independent Assurance Regime – Options for TfL



## Options Description Benefits Risks

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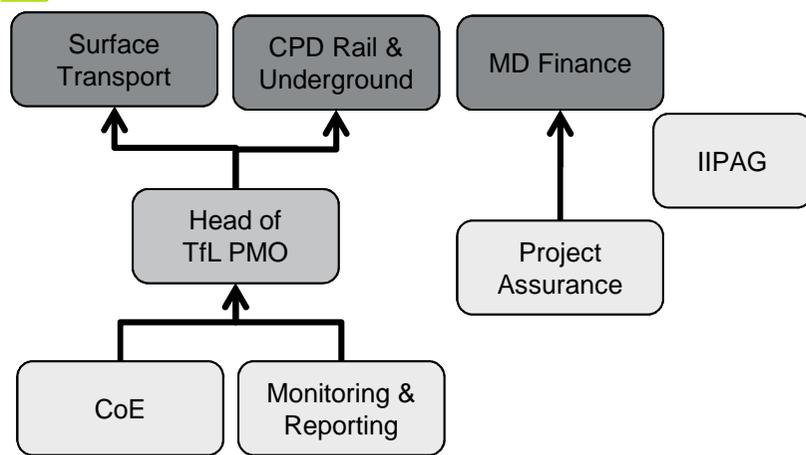


TfL PMO is separated from CPD Rail & Underground; Head of TfL PMO reports solely to MD Finance; IIPAG reviews independently

1. Alignment with peers' structure
2. Alignment with three lines of defence model outlined by HM Treasury Assurance Frameworks
3. Integrated PMO function
4. Stable platform to develop other elements of Assurance, e.g. Knowledge Share, Continuous Assurance, etc.
5. Fully separated Project Assurance from Delivery
6. Perception across delivery teams of a more credible external assurance provided

1. TfL PMO seen as a primarily Assurance function reviewing projects
2. At odds with IIPAG recommendations
3. Project Assurance reliance on CoE and Monitoring & Reporting for other elements of Assurance
4. CPD Rail & Underground lacking support from TfL PMO functions (CoE, Monitoring & Reporting)

4

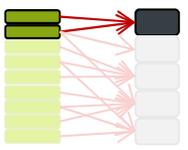


Project Assurance team separated from PMO and reports solely to MD Finance; IIPAG reviews independently; TfL PMO reports solely to CPD Rail & Underground and Surface Transport

1. Fully independent Project Assurance
2. Perception across delivery teams of a more credible external assurance provided by both Project Assurance and IIPAG
3. Project Assurance able to escalate issues, risks directly to MD Finance
4. Efficient use of TfL PMO resources by CPD Rail & Underground driving performance improvement (This links to the requirement for raising capability in CPD around continuous improvement\*)

1. Project Assurance lacking the technical capability to apply continuous assurance as appropriate
2. Overlap between Project Assurance and IIPAG in reviews of major projects
3. Project Assurance becomes isolated and detached from Monitoring & Reporting and CoE. Risks, issues are not early identified, and lessons learned and good practices are not effectively communicated
4. TfL PMO lacking oversight on project delivery teams performance and assurance reviews' results

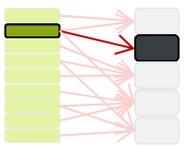
\* Source: CPD Benchmarking, August 2014, EC Harris



# Independent Assurance Regime – Options for TfL

- A change in the organisational structure at TfL is not considered necessary based on the existing approach at TfL and the relevant examples from other peers. The existing structure reflects the three lines of defence model outlined by the HM Treasury Assurance frameworks.
- However, should TfL want to embrace the benefits that could be delivered through a separation of Project Assurance and PMO, an independent Project Assurance could be established. The independent Project Assurance could report directly to the MD Finance.
- The main driver for a change should be the independence of the Project Assurance team.
- Based on the 2<sup>nd</sup> option (*Project Assurance separated from TfL PMO*), an independent Project Assurance would be able to escalate risks and issues directly to the MD Finance.
- Based on the 3<sup>rd</sup> option (*TfL PMO separated from CPD Rail & Underground*), a separated TfL PMO would ensure an independent Project Assurance and also an effective integrated team. This would ensure a balance between assurance and continuous improvement. However, this option leads to a lack of continuous improvement capability in CPD Rail & Underground.
- Based on the 4<sup>th</sup> option (*Project Assurance separated from TfL PMO and TfL PMO reporting solely to CPD Rail & Underground*), Project Assurance becomes fully independent and CPD Rail & Underground and Surface Transport ensures that appropriate performance improvement capability is in place.
- Also, the perception of credibility of the Project Assurance would improve given that the latter would not be linked with the delivery of projects (CPD Rail & Underground).
- For any option taken forward, Project Assurance technical capability should be raised in order to cover other elements of assurance beyond the reviews, e.g. continuous assurance, knowledge-sharing, etc.
- The options contained in this report should not be taken as the only options available to TfL

# Risk-based Assurance



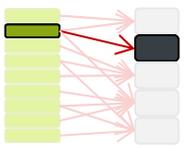
## Assurance Plan

- The review of the current approach at TfL indicates that the estimated final cost is the main indicator to define the appropriate level of assurance.
- The Integrated Assurance and Approval Strategy (*Cabinet Office, May 2011*) highlights that the assurance plan must be proportionate with the complexity of, and risks associated with, the project. A project's level of complexity and risk are key factors, alongside its cost, that define the level of assurance required.
- A low or mid-value project that has some interface (e.g. schedule) with a major project could have dramatic consequences for the organisation if an effective assurance management plan hasn't been established, and key issues and risks haven't been early identified and mitigated.

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# Risk-based Assurance



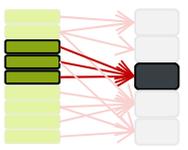
## Assurance Plan

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- In order to achieve the efficient review of projects at the appropriate assurance levels, there is a need for early engagement of the Assurance function with the project teams.
- Project teams and Assurance can assess the risks of the project and tailor the Assurance Plan to the size and complexity of the project.
- Assurance will be proactive and sufficiently flexible to ensure that all appropriate assessments and reviews are carried out for the projects delivered and all risks are mitigated effectively.

# Benefits Realisation



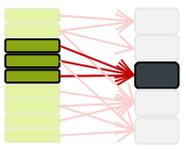
## Monitoring Benefits and Reviewing Investment Decision

- Benefits Realisation has been identified as an area of improvement at TfL. There is very little evidence that benefits realisation has directed programme decisions and changes. Findings from the assurance approach review at TfL indicate that apart from a light touch of benefits monitoring, there isn't an established process to ensure the successful realisation of benefits.
- There have been occasions that reviews have not taken place during the final stages of a project. Project Assurance reviews are mainly focused around the Project Authorities. Therefore when project delivery teams do not request Project Authority at the closeout of a project any relevant gateway reviews (Integrated Assurance Reviews) are not being undertaken.
- TfL has recently broken down Project Closeout into two stages, separating the snagging and financial settlement from the business case review and benefits delivery. The final Integrates Assurance Reviews should be aligned with these recently established stages.

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# Benefits Realisation



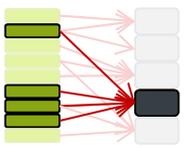
## Monitoring Benefits and Reviewing Investment Decision

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- PMO Project Assurance function plays a critical role in the Benefits Realisation through the reviews carried out at different stages of the projects. TfL can gain confidence that projects are delivered efficiently and effectively, value for money is achieved for customers, and all benefits are realised as appropriate.
- The findings from the assurance reviews can feed into future investment decisions building solid business cases for future projects.

# Continuous Assurance



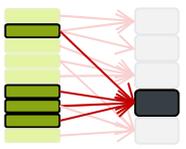
## Assurance Plan, Performance Management, Capturing Information, Escalation Routes

- An effective assurance approach requires the continuous assurance of projects. This can be achieved through the identification of trends based on performance reporting and monitoring. In this way key risks and issues can be early identified, escalated as appropriate and proactively managed.
- This approach requires the successful collaboration of PMO Project Assurance and Reporting & Monitoring teams. Key findings of the TfL Assurance review indicate that there is no clearly defined process for the collaboration required.

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# Continuous Assurance

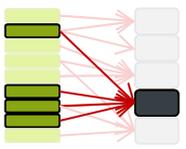


Assurance Plan, Performance Management, Capturing Information, Escalation Routes

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# Continuous Assurance



## Assurance Plan, Performance Management, Capturing Information, Escalation Routes

- TfL PMO should establish a continuous assurance approach
  - Based on the information captured by PMO Monitoring and Reporting risks and issues can be identified early and escalated as appropriate
  - Targeted reviews can be commissioned in order to ensure that projects are on track
- TfL PMO should raise the technical capability of the PMO Project Assurance team
  - PMO Project Assurance team should be able to identify risks and issues in the information captured throughout the project lifecycle
  - PMO Project Assurance team should assess project performance and how successful delivery teams utilise lessons learned from previous reviews driving a continuous improvement culture
- TfL PMO should integrate the PMO Project Assurance team with PMO Monitoring & Reporting and CoE
  - The effective collaboration of the three teams is required in order to achieve continuous assurance
  - PMO Monitoring and Reporting should capture and feed information to the PMO Project Assurance
  - PMO Project Assurance should identify and review risks, issues, opportunities and examples of good practice. These should feed into the CoE and communicated across the project delivery teams.
- TfL can achieve significant benefits through a continuous assurance approach. Risks and opportunities could be early identified and escalated as required. Targeted reviews would diagnose the reason for inadequate performance and support the improvement / establishment of appropriate controls. Senior management will be better informed throughout the delivery of a project gaining confidence for decision-making as appropriate.

# Programme Assurance



## Capturing information, Continuous Improvement, Benefits Realisation

- The current assurance approach at TfL is heavily focused around Project Assurance. However, Programme Assurance is an effective way to ensure the integrity of the Programme from a performance perspective and provide all the key information needed to support the strategic direction at TfL. Aspects of Programme Assurance are noticed only on reports produced by IIPAG. These discuss systemic issues that are identified across multiple reviews of projects.
- Programme Assurance is the independent assessment and confirmation that the programme as a whole or any of its aspects are on track, applying relevant practices and procedures, and that the projects, activities and business rationale remain aligned to the programme's objectives. (*Department for Business Innovation & Skills*)
- Programme Assurance is aligned with the continuous improvement of the project delivery teams. The latter can benefit from performance benchmarking and knowledge sharing. Assurance function plays a critical role in this. Any lessons learned and/ or examples of good practice captured through the reviews can be communicated across the different delivery teams. Driving a continuous improvement culture, Assurance can assess how successfully project teams implement the lessons learned and good practices on the delivery.
- In addition, assurance at Programme level is an effective way to review the benefits delivered by the numerous projects and how these integrate together to align with the organisation's strategy.

# Programme Assurance

Capturing information, Continuous Improvement, Benefits Realisation



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# Programme Assurance

Capturing information, Continuous Improvement, Benefits Realisation



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# Programme Assurance



## Capturing information, Continuous Improvement, Benefits Realisation

- TfL should establish a Programme Assurance approach.
  - PMO Project Assurance should capture lessons learned and examples of good practice through the reviews and communicate these across the different projects with the help of the CoE
  - PMO Project Assurance should measure the successful implementation of the lessons learned and good practice examples in future reviews driving a continuous improvement culture
  - Reviews at Programme level should assess benefits delivered through the projects and how these integrate together aligned with the organisation's strategy
- TfL should achieve significant benefits through a PMO co-ordinated Programme Assurance
  - Project delivery teams can improve performance through lessons learned and good practice
  - A continuous improvement culture will be embedded to the delivery if PMO Project Assurance assess the successful implementation of the lessons learned and good practice examples in future reviews
  - Benefits delivered by different projects will be reviewed against the organisation's strategy
  - Projects delivering the same or similar benefits will be identified and re-assessed against their business case

# Findings and recommendations

# Summary findings

## ■ Structure and lines of defence

- First and second lines of defence at TfL are in line with peer organisations and structured in line with best practice approach as outlined by HM Treasury (*Assurance Frameworks, 2012*)
- Third line of defence (IIPAG) is independent with respect to its reporting structure but not as truly independent as those bodies tasked with third line activity in peer organisations e.g. , .
- Independence of the Project Assurance (and perception of its independence by others) is a key driver for TfL. Based on the existing TfL PMO structure Project Assurance is not fully independent but it is separated from the delivery teams.
- Second and third line reviews are producing complimentary outputs for the same audience. In peer organisations with a similar assurance approach, reviews investigate different elements of the project and are issued to different audiences as appropriate.

## ■ Capability

- TfL PMO Project Assurance team delivers an excellent administrative role as part of the Assurance Framework. A lack of technical capability in TfL PMO Project Assurance team leads to overreliance on External Experts and limited collaboration with other parts of TfL PMO (CoE, Monitoring & Reporting). High performing organisations have integrated assurance with other teams (e.g. Programme Controls, Continuous Improvement) ensuring a balance between assurance and performance improvement.

## ■ Approach

- TfL Project Assurance focuses on specific review points of projects. High performing peer organisations have established a continuous assurance approach at programme level that allows risk-based reviews and interventions of the Project Assurance as required.

# Recommendations

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## ■ Structure and lines of defence

- In **short term** maintain existing structure to be on a par with best practice and peers
- In **longer term** enhance independence further and address concerns by assessing other structures and reporting lines
- Clarify roles and responsibilities and form approach to any necessary change
- Ensure impact of other ‘soft’ changes e.g. continuous assurance are considered

## ■ Capability

- **Better integrate** Assurance with CoE and Monitoring & Reporting to enable a value adding approach
- Raise capability of the PMO Project Assurance team
- **Technically competent** resources to challenge project delivery teams and External Experts’ reports

## ■ Approach

- Establish a **continuous assurance** approach
- Adopt a **programme approach** that connects project assurance to overall programme requirement
- Move from finance driven to a **risk based** model that develops assurance plans proportionate with the complexity of, and risks associated with the project
- Ensure **knowledge sharing** across different project delivery teams

# Appendix I – Description of peers Assurance approach

Further information on peer group assurance

# Assurance Framework

TfL Project Assurance is part of the Integrated Assurance Framework which also includes Internal Audit, HSE & Technical reviews and Risk.

Project Assurance in TfL is defined by Pathway as part of the Governance component and replaced the Corporate Gateway Approval Process (CGAP) in April 2013.

TfL Pathway is an integrated and consistent framework aiming to provide the tools for delivery teams and their stakeholders to work effectively.

Based on the TfL Pathway all projects follow the six project lifecycle stages shown below.



TfL Pathway is part of the TfL Management System and its use is mandatory for all project, programme and delivery portfolio work at TfL. It is the accountability of each business area to implement TfL Pathway effectively, supported by the TfL Programme Management Office (PMO).

At the heart of TfL Pathway, sits the Pathway Product Management Plan (PPMP). This requires project teams to deliver a set of products at each stage. Projects are assessed against these products through Stage Gates and Integrated Assurance Reviews (IARs).

It's the accountability of Sponsors to ensure that projects are fit to proceed to the next stage through Stage Gates.

On top of that, PMO Project Assurance will assess the projects through External Experts (EEs) and Peers when projects request financial authority to proceed.

For projects with a value greater than £50m, the Independent Investment Programme Advisory Group (IIPAG) provides independent assurance and expert advice in addition to the assurance provided by TfL PMO.

# Assurance Framework

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