Audit and Assurance Committee

Date: 14 December 2017



Item: Risk Appetite Update

This paper will be considered in public

1 Summary

1.1 The purpose of this paper is to present to the Committee a report on Risk Appetite, setting out TfL's agreed level of risk appetite against a number of themes, the proposed approach to reporting on risk appetite, and next steps for implementing risk appetite as a 'business as usual' activity

2 Recommendation

2.1 The Committee is asked to approve the risk appetite themes and levels, and the proposed approach to reporting and next steps as set out in the attached Risk Appetite Report.

3 Background

- 3.1 Earlier this year, TfL began to develop its approach to Risk Appetite. The aim was to explore how much risk TfL is willing to take to meet its strategic goals and how this should guide decision making.
- 3.2 Starting with consideration of TfL's purpose and its six strategic priorities, initial work focused on defining a number of distinct themes against which risk appetite could be measured. These were then mapped to TfL's Strategic Risks.
- 3.3 A workshop session involving members of the Executive Committee and the Board was held in April 2017. This session, which was highly interactive and insightful, was chaired by the Chair of the Audit and Assurance Committee and facilitated by a risk specialist from Ernst &Young. The purpose of the session was to ratify the proposed risk appetite themes and to agree the level of risk that TfL was willing to accept in relation to each theme.
- 3.4 The outputs from the risk appetite session were consolidated into a report that was presented to the Executive Committee on 8 November 2017. The report also set out the proposed approach to reporting on risk appetite going forward, and next steps.
- 3.5 The Executive Committee approved the Risk Appetite Report, but noted that some of the risk themes were expressed as positive statements and others as negative statements. It requested that all of the risk themes be expressed as positive statements to provide greater consistency. The Risk Appetite Report in Appendix 1 includes the restated risk themes as requested by the Executive Committee.

4 Next Steps

- 4.1 The proposed Next Steps are set out in section 5 of the Risk Appetite Report and are summarised as:
 - (a) agree a final reporting format for reporting on risk appetite to the Executive Committee and the Board (and its Committees and Panels);
 - (b) expand the identification and documentation of Key Risk Indicators (KRIs) to support the reporting; and
 - (c) establish procedures, with roles and responsibilities, to support the regular reporting process.

List of appendices to this report:

Appendix 1: Risk Appetite Report

List of Background Papers:

None

Contact Officer:	Howard Carter, General Counsel
Number:	020 3054 7832
Email:	HowardCarter@tfl.gov.uk

14TH DECEMBER 2017

Risk Appetite Report (Appendix 1)

Audit and Assurance Committee



EVERY JOURNEY MATTERS

Contents

9

1. Risk appetite as agreed at the TfL Board session	3
2. Quantifying risk appetite	7
3. Reporting risk appetite	9
4. Next steps	14
5. Appendices	16

I. Risk Appetite as agreed at the TfL Board Session

Background

This section summarises the output of TfL's risk appetite assessment process and provides an articulation of TfL's risk tolerances and expectations in the context of its strategic goals.

It is intended that this expression of risk appetite provides a reference point to benchmark risk-taking and risk response. The representation of risk appetite across the various themes identified provides a mechanism to clarify differences in view amongst senior stakeholders and also provides a basis for building consensus.

The development of the risk appetite identified here provides a framework to make informed decisions and in its cascade through TfL it will help to promote appropriate behaviour.

Content

- 1. The following slide outlines the risk appetite themes and the appetite levels agreed for each of them.
- 2. Each of these themes is then described in more detail. These descriptions should not be thought of as definitions but rather as examples of what is meant by each of the themes.

At the request of the Executive Committee, all of the themes have been expressed consistently as positive statements. Previously they were a mix of positive and negative statements.

3. A further slide is included to show how risk appetite maps to TfL's strategic risks and performance measures.



1. Risk Appetite for TfL

I – themes

	Theme	Category	Appetite to take risk
1	Ensuring Safety	Core	Very Low Appetite
2	Effective performance of core services	Core	Low Appetite
3	Maintenance of financial sustainability	Financial	Very Low Appetite
4	Extending revenue generation	Financial	Significant Appetite
5	Maintenance of Capital delivery	Financial	Low Appetite
6	Achieving high performing organisation standards	People	Very Low Appetite
7	Building Capability and competence	People	Significant Appetite
8	Good employee/ employer relations	People	Low Appetite
9	Positive Environmental impact	Footprint	Significant Appetite
10	Positive Social and economic impact	Footprint	Significant Appetite
11	Positive Customer experience	Footprint	Low Appetite
12	Relevance and willingness to innovate	Adaptability	Significant Appetite



1. Risk Appetite for TfL

2 - descriptions

	Theme	Description Ap	petite
1	Ensuring Safety	e.g. to what extent is TfL prepared to accept risks that may lead to death or serious injury or that may otherwise, directly or indirectly, affect the safety or security of passengers, employees or the wider public	VL
2	Effective performance of core services	e.g. to what extent is TfL willing to accept risk that may affect the delivery of its core services	L
3	Maintenance of financial sustainability	e.g. to what extent is TfL prepared to accept risks that its actions will impair its medium and long term financial sustainability.	VL
4	Extending revenue generation	e.g. to what extent is TfL prepared to accept risk in generating additional sources of income and in improving returns on existing sources.	S
5	Maintenance of Capital delivery	e.g. to what extent is TfL prepared to accept significant delays, failure or the failure to realise anticipated benefits in the delivery of major capital projects	L
6	Achieving high performing organisation standards	e.g. to what extent is TfL willing to accept goals and behaviours or conduct that do not reflect the organisation's core values and goals.	VL
7	Building Capability and competence	e.g. to what extent is TfL willing to accept risk to build capability to transform and operate TfL.	S
8	Good employee/ employer relations	e.g. to what extent is TfL, while acting within the standards of good practice, prepared to tolerate the risk of discord with sections of its workforce.	L
9	Positive Environmental impact	e.g. to what extent is TfL prepared to accept risk in improving its environmental impacts (noise, pollution etc.).	S
10	Positive Social and economic impact	e.g. to what extent does TfL have an appetite to generate positive social, economic and accessibility impacts.	S
11	Positive Customer experience	e.g. to what extent is TfL prepared to accept risks that may have a negative effect on the quality of the customer experience.	L
12	Relevance and willingness to innovate	e.g. to what extent is TfL prepared to accept risks in order to remain the principal enabler of transportation services for London	S

I. Risk Appetite for TfL

3 - links

Linking the themes to strategic risks and performance measures

Themes	Strategic Risks	Measures	Themes	Strategic Risks	Measures
Effective Performance of core services	SR14. Managing railway or strategic road network asset base SR15. Operational Reliability SR10. Ability to meet increasing demand SR12. Significant Technology failure or cyber attack	 London Buses: Excess Wait Time London Underground: Total Lost Customer Hours DLR: Departures TLRN: Journey Time Reliability 	Good employee/ employer relations	SR2. Workforce adaptability	 Number of working days lost due to strike action
Ensuring Safety	SR I. Safety Standards SR I I. Catastrophic Event	Av. no. crimes/mm journeys Total Customer & Workforce Injuries	Achieving high performing organisation standards	SR3. Governance suitability	• Total Engagement Index calculated by the HR team
Positive social and economic impact	[Separate documentation of a social and economic impact risk to be considered at a future date]	 % affordable housing units Proportion of journeys which could be made step free on R&U network Additional journey time for passengers with accessibility needs 	Maintenance of Financial sustainability	SR7. Financial sustainability SR8. Unexpected loss of income SR9. Delivery of commercial revenue targets	 Operating costs divided by the total number of journeys Annual growth in operating income (Proposed) % Total Deficit in pension fund/Total Pension liability
Positive Environmental impact	SR I 6. TfL's impact on environment SR I 7. External environmental impact on TfL	 NOx emissions from bus fleet Central London Cycling - % Growth in CC Zone Total Hybrid Fleet - ULEZ Compliance 	Building capability and competence	SR2. Workforce adaptability	 Workforce Representative Index (as on TfL Scorecard) Inclusion index (calculated from Viewpoint)
Positive customer experience	SR 10. Ability to meet increasing demand SR6. External stakeholder expectations SR 19: Decreasing ridership of buses	 Customer care (part of wider reputation survey) Public Performance Measure 	Maintenance of capital delivery	SR 13. Delivery of key investment programmes SR20. Delivery of Elizabeth Line	 London Underground and Surface: Project Milestone Delivery (Budget Milestones and Programme Accountability Milestones)
Relevance and willingness to innovate	SR4. Foresight strategy SR5. Technological or market developments	 Available Passenger Kilometres/ Service Volume Projected passenger journeys (+1Year) 	Extending revenue generation	SR7. Financial sustainability SR18.Delivery of modernisation for LU	 Underground: % operating costs covered by fares Annual growth in operating income Buses: % operating costs covered by fares



2. Quantifying risk appetite

A six point scale has been created to record TfL's appetite around each of the themes.

The scale has been created explicitly to recognise that there are areas where TfL is prepared to take risk in the delivery of its purpose and strategic goals.

This scale has been devised after some consideration and may undergo further evolution as TfL's risk appetite matures.

It is notable that the appetite for none of the current themes is at either extreme of the range. It is also notable that for none of the themes did TfL express that it had a neutral attitude.

A particular point to note is that the idea of a 'zero appetite' was considered as part of the process but that it was felt that in practical terms this could represent an impossible standard and that while TfL would wish not to take certain risks (e.g. around safety) the complete elimination of these risks was incompatible with the fulfilment of TfL's purpose.



2. Quantifying risk appetite

I - appetite levels

High appetite	+	TfL is prepared to take more of this risk
Significant appetite	+	TfL is prepared to take more of this risk subject to other appetite measures
Limited/Neutral appetite	=	TfL is neutral about taking this risk
Low appetite		TfL wants to take less of this risk subject to other appetite measures
Very low appetite		TfL wants to take as little of this risk as is reasonably practicable
Extremely low appetite	ø	TfL does not want to take this risk but recognises that the complete elimination of this risk is outside of its control

3. Reporting risk appetite

Reporting cycle

It is proposed that performance around risk appetite measures is reported at the Executive Committee, the Audit and Assurance Committee and the Board.

Regular reporting across all themes should take place at sufficient intervals to provide insight and time for mitigating action. It is suggested that reporting takes place on a quarterly basis or on an approximately quarterly basis corresponding to the Audit Committee cycle.

It is proposed that the regular reporting process should proceed as follows:

Executive Committee – receives report and updates for actions taken or planned

Audit and Assurance Committee – reviews and comments and recommends to the Board

Board – responds to actions taken and planned, and mandates any further action as required

Additional *ad hoc* reporting should be provided to the Executive Committee where the Risk function believes that there has been a significant movement against one or more of the risk appetite measures. It would then be for the Executive Committee to determine whether the movements should be reported further.



3. Reporting risk appetite

The reporting process

The regular risk appetite report should provide the readers with all of the important information in a compact and comprehensible manner. The reader should be further able to delve behind this information in order to substantiate the information reported. It is proposed that the main report consist of no more than two pages and the additional information should be set out in appendices to the report.

Main report

The main report should include the following information for each risk appetite theme:

- Theme name
- Target risk appetite level
- Measure of current risk as determined using relevant KRIs
- Direction of travel
- Any comment on current or expected status

It is suggested that some form of graphical interface be used, perhaps with a simple RAG 'traffic light' indicator.

The following slide shows a format that could address these requirements. The content is hypothetical and for illustrative purposes only.



3. Reporting risk appetite – EXAMPLE OF MAIN REPORT

	Theme	Category	Target	Within Target Range?	Position within range	Comment
1	Ensuring Safety	Core	VL	•	Risk Target Upper demon	Risk level has risen in last quarter but remains near the centre of the target range.
2	Effective performance of core services	Core	L	•	Risk Targer	Risk level remains near the bottom of the target range with some movement around the target level over the last quarter due to decrease in bus wait times.
3	Maintenance of Financial sustainability	Financial	VL	•	Risk Target (Sole A de Bange	Risk level near the bottom of the target range and has remained relatively stable within the period.
4	Extending revenue generation	Financial	S	•	Pisk Targer 4000 Central Control Contr	Risk level is below the target range due to slow progress on income diversification program.
5	Maintenance of capital delivery	Financial	L	•	Pisk Targer 4000-100 Page	Risk level is above the target range due to earlier forecasts of Queen Elizabeth line delays. These are being addressed and the measure is returning toward target range.
6	Achieving high performing organisation standards	People	VL	•	Pisk Target Contraction of the second	Risk level has been stable and within target range.

Within Target Range Out of Range and Negative Trend

Page 11

Out of Range

and Positive

Trend

3. Reporting risk appetite

Building the report from the KRI information

The following slide sets out how the information to support the risk appetite reporting can be built up from the key risk indicator data.

We have created a report based on data collected at Group level (the actual data on the slide is hypothetical for purposes of illustration).

The slide shows how real data from KRIs can be combined to show performance around the measures that feed into the Executive/Board level reports.

For movements within the target range, KRI data can be compared with the prior period to establish direction.

It would also be possible to include further, more granular information using the same second tier risk appetite measures and their corresponding KRIs for the individual business units. This would allow a further cascade of risk appetite reporting to allow performance around risk appetite to be considered at a more detailed level e.g. the second tier measures could be gathered against individual modes of transport or against the broad divisions (Surface and London Underground).

Given the additional work required to gather this information it is suggested that this might be a longer term rather than a more immediate goal.



3. Reporting risk appetite I - EXAMPLE of Group level indicators

Impairment of Performance of core services

This slide shows how the top tier risk appetite measures can be broken into their component elements and matched to appropriate indicators.

First Tier	Second Tier	Second Tier Description	Key Risk Indicator	Lower Tolerance	Risk Target	Upper Tolerance	Pan TfL Actuals	Pan TfL Status
Effective performance of core services	Reliability	Key assets are reliable and available when needed, so that customers can use them in a timely manner	% of schedule operated as planned	90.0%	95.0%	98.0%	91.2%	
			% of lost Customer Hours over total available hours	4.0%	10.0%	20.0%	8.5%	
e.g. to what extent is TfL willing to accept risk that may affect the delivery of its core services	Capacity	Key assets are capable of supporting the growth of population and reduction of car usage	% of projected passenger journeys (+5Years) / Projected capacity	92%	95%	99%	96.7%	
	Customer Satisfaction	Customers are sufficiently satisfied with the services provided when taking in consideration level of service offered to them	Customer satisfaction score	85	90	98	90.7%	



------ Illustrative --

EVERY JOURNEY MATTERS

4. Next steps

The next steps consist of three main exercises:

1. Agree a final format for Executive Committee and Board risk appetite reporting

A draft reporting format and reporting cycle have been provided in section 4 of this report. The Board and Executive Committee are asked to approve the reporting cycle.

Timescale: Draft reporting cycle – Complete Draft reporting format - Ongoing – we will be finalising the Key Risk Indicator format over the next few months as we agree the Key Risk Indicator measures, and have collated the relevant information.

2. Expand the identification and documentation of Key Risk Indicators (KRIs) to support the reporting

In the course of the work conducted the population of performance measures was assessed and suitable measures selected to support each of the risk appetite themes. This population should be further deepened to provide greater rigour to the risk appetite reporting process.

Timescale: Ongoing – we are currently in the process of reviewing these performance measures



4. Next steps

3. Establish procedures, with roles and responsibilities, to support the regular reporting process

The draft reports have been created by EY and the TfL strategic risk function. Procedures need to be created and responsibilities allocated to facilitate the regular gathering of this data and its refinement in the preparation of reports.

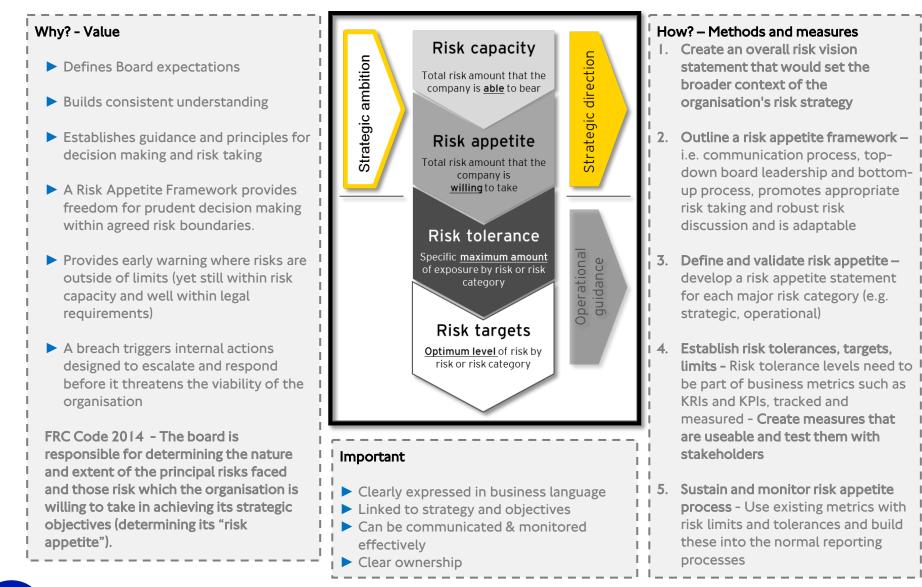
Timescale: December 2017 – February 2018 Over the next few months, post Transformation, the new Risk, Audit and Assurance Function will address this and ensure that we have the appropriate roles, responsibilities and procedures for this reporting to take place



5. Appendices

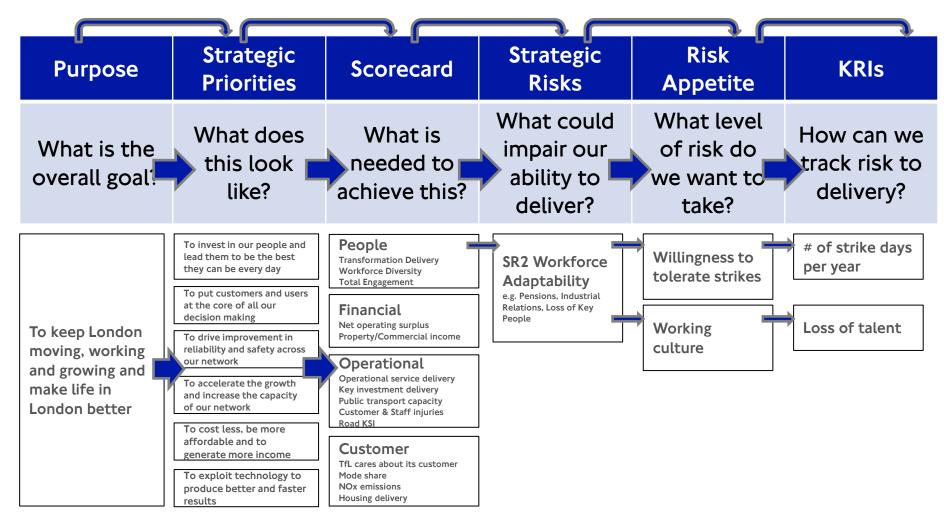
- 1. Risk appetite overview
- 2. How risk appetite works
- 3. Setting the level of risk appetite
- 4. Key definitions

Appendix 1 - Risk Appetite Overview



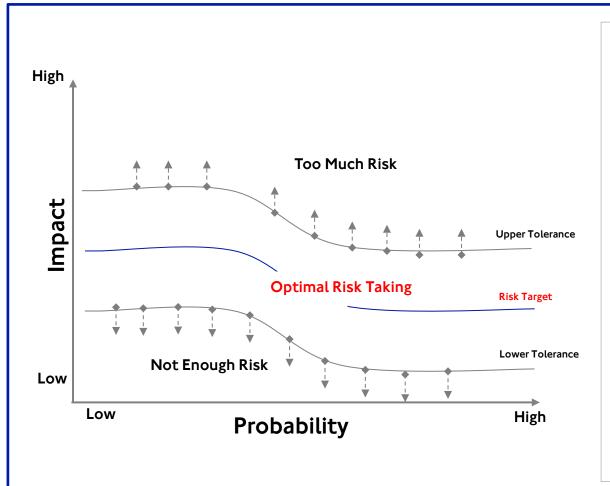
EVERY JOURNEY MATTERS

Appendix 2 - How Risk Appetite works (TfL)





Appendix 3 - Setting risk appetite levels



The Trade-off Concept

The Optimal Risk Taking zone is the point in which the organisation is operating under a balance of risk taking and pursuing strategic objectives, i.e. the organisation is taking the desired amount of risk to achieve its strategic objectives. As shown in the graph on the left, the optimal risk taking zone shifts according to the probability and potential impact of uncertainties.

A <u>trade-off</u> is often required to ensure that an organisation's risk universe remains within the optimal risk taking zone. For instance, TfL might have to increase its spending on safety procedures in order to reduce the exposure to accidents to an acceptable level. However, over spending on safety precautions can result in spending too much on managing even the low-impact operational risks.

Finding the right balance between risk taking and mitigation should be the main objective of all Risk Management efforts. A well-defined Risk Appetite framework is the cornerstone to a sound risk management model.

Appendix 4 – Key definitions

Risk	Risk is the "effect of uncertainty on objectives" and an effect is a positing negative deviation from what is expected.	Source: ISO 31000
Uncertainty	Uncertainty (or lack of certainty) is a state or condition that involves a of information and leads to inadequate or incomplete knowledge or understanding.	Source: ISO 31000
Risk Appetite	Risk Appetite is the total exposed amount that an organization wishes undertake on the basis of risk-return trade-offs for one or more desired and expected outcomes	Source: RIMS
Key Risk Indicators (KRIs)	A Key Risk Indicator, also known as a KRI, is a metric used by managem indicate changes in exposure to potential risk events.	Source: PRMIA
Risk Tolerance	Risk Tolerance is the amount of uncertainty an organization is prepare in total or more narrowly within a certain business unit, a particular ris or for a specific initiative.	-
Risk Target Range	Risk target range is the ideal goal for the risk based on the organization objectives, risk appetite, and risk tolerance.	1'S Source: RIMS