Pensions Audit Sub Committee

2.00pm, Tuesday, 25 June 2019

Lothian Pension Fund - Internal Audit Opinion and Annual Report for the Year Ended 31 March 2019

Item number	**5.2**
Executive/routine	
Wards	
Council Commitments	

1. Recommendations

1.1 It is recommended that the Committee notes the Internal Audit (IA) opinion for the year ended 31 March 2019.

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Report

Lothian Pension Fund - Internal Audit Opinion and Annual Report for the Year Ended 31 March 2019

2. Executive Summary

2.1 This report details Internal Audit's annual opinion for Lothian Pension Fund (LPF) for the year ended 31 March 2019.

2.2 Our opinion is based on the outcomes of four audits included in the LPF 2018/19 Internal Audit annual plan, and the status of open and overdue Internal Audit findings as at 31 March 2019.

2.3 Internal Audit considers that the LPF control environment and governance and risk management frameworks are generally adequate but with enhancements required and is therefore reporting a 'amber' rated opinion (see Appendix 1), with our assessment towards the middle of this category.

2.4 This report is a component part of the overall annual assurance provided to LPF, as there are a number of additional assurance sources that the Committee should consider when forming their own view on the design and effectiveness of the control environment and governance and risk management frameworks within LPF.

3. Background

3.1 The Public Sector Internal Audit Standards (PSIAS) provide a coherent and consistent internal audit framework for public sector organisations. Adoption of the PSIAS is mandatory for internal audit teams within UK public sector organisations, and PSIAS require annual reporting on conformance.

3.2 It is the responsibility of the Council's Chief Internal Auditor to provide an independent and objective annual opinion on the adequacy and effectiveness of LPF's control environment and governance and risk management frameworks in line with PSIAS requirements. The opinion is provided to the Pensions Audit Sub-Committee, and should be used to inform the LPF Annual Governance Statement.

3.3 The annual opinion is based on the outcomes of the three audits included the LPF 2018/19 Internal Audit annual plan. These audits were designed to test the effectiveness of the controls, and governance and risk management frameworks, established to effectively mitigate and manage LPF's risks.

3.4 Where control weaknesses are identified, Internal Audit findings are raised, and management agree recommendations to address the gaps identified. However, it is the responsibility of management to address and rectify the weaknesses identified via timely implementation of these agreed management actions.

3.5 The annual opinion also takes into account the status of open and overdue IA findings as at 31 March in the relevant plan year. The IA definition of an overdue finding is any finding where all agreed management actions have not been implemented by the final date agreed by management and recorded in Internal Audit reports.

4. Main report

Internal Audit Opinion

4.1 Internal Audit considers that the LPF control environment and governance and risk management frameworks are generally adequate but with enhancements required and is therefore reporting a 'amber' rated opinion (see Appendix 1), with our assessment towards the middle of this category.

4.1 This opinion is subject to the inherent limitations of internal audit (covering both the control environment and the assurance provided over controls) as set out in Appendix 2.

4.2 Internal Audit is not the only source of assurance provided to LPF as there are a number of additional assurance sources (for example, external audit) that the Committee should consider when forming their own view on the design and effectiveness of the LPF control environment and governance and risk management frameworks.

Basis of opinion

4.4 Our opinion is based on the outcome of audits completed in the year to 31 March 2019, and the status of open internal audit findings.

Audit outcomes

4.5 Three internal audit reviews were completed during the year, with all reports rated as 'Adequate', confirming that adequate and appropriate control environments were established to support the areas included in the scope of the reviews.

4.6 No findings were raised in the Stock Lending and Unlisted Investment Valuations and Application of Fund Administration Fees and Charges reviews, and three findings (one Medium; one Low; and one Advisory) were raised in our Unitisation review.

4.7 The Medium finding raised in the Unitisation review highlighted the need for LPF to ensure that third party system suppliers have established adequate and effective security; resilience; and user access arrangements, and effective change management controls to provide assurance on the ongoing integrity of their systems.

This is aligned with the most significant findings raised from reviews included in the 2017/18 IA annual plan, and reported in the 2017/18 annual IA opinion presented to the Committee in June 2018.

4.8 Given LPF's dependence on the City of Edinburgh Council for a number of support services, we have also considered the outcomes of relevant work performed on the Council's control environment and governance and risk management frameworks. The Council's annual internal audit opinion will be presented to the Governance, Risk, and Best Value Committee meeting in August 2019.

Status of Internal Audit Findings as at 31 March 2019

4.9 LPF had a total of 6 open Internal Audit findings (3 High; 1 Medium; and 2 Low) that relate to reviews completed as part of the 2016/17 and 2017/18 annual plans. As at 31 March 2019, all of these findings were overdue, as management actions were not completed by the agreed implementation dates. However, evidence had been provided by LPF to Internal Audit to support closure of 2 High and 1 Low rated findings.

4.10 All remaining overdue findings (1 High; 1 Medium; and 1 Low) where evidence had not been provided to support closure at 31 March 2019 were more than 12 months overdue in comparison to their originally agreed implementation dates.

4.11 Significant progress with these overdue findings is evident since 31 March 2019, with one High rated finding now closed, and evidence provided to support closure of all remaining findings.

Further detail is included at Appendix 3.

Comparison to prior year

4.12 A red rated opinion was reported in 2017/18 reflecting significant enhancements were required to the LPF control environment and governance and risk management frameworks with our assessment towards the middle of this category.

4.13 A direct comparison between annual Internal Audit opinions is not always possible as the scope of the audits included in the annual plans will vary in line with the changing LPF risk profile.

4.14 However, it should be noted that the number of findings raised in 2018/19 (3) has decreased in comparison to the number raised in 2017/18 (12). The number of High rated findings raised has also decreased from 4 to none, and the number of overdue findings has increased from 2 to 6.

Internal Audit Independence

4.15 PSIAS require that Internal Audit must be independent and that internal auditors must be objective in performing their work. To ensure conformance with these requirements, Internal Audit has established processes to ensure that both team and personal independence is consistently maintained and that any potential conflicts of interest are effectively managed.

4.16 We do not consider that we have faced any significant threats to our independence during 2018/19, nor do we consider that we have faced any inappropriate scope or resource limitations when completing our work.

Conformance with Public Sector Internal Audit Standards

4.16 Internal Audit has not fully conformed with PSIAS requirements during 2018/19 for the following reasons:

4.16.1 Resourcing challenges within the Internal Audit team has impacted completion of the internal quality assurance reviews included in the 2018/19 Internal Audit annual plan to ensure consistency of audit quality.

4.17 It should be noted that this instance of non-conformance has had no direct impact on the quality of internal audit reviews completed for LPF in 2018/19.

Action taken to address instances of non PSIAS conformance

4.18 Internal quality assurance reviews will be reinstated with effect from 1 April 2019, with two quality assurance reviews scheduled for completion in the 2019/20 plan year.

5. Next Steps

5.1 IA will continue to monitor progress with plan delivery.

6. Financial impact

6.1 There are no direct financial impacts arising from this report, although failure to close IA findings raised and address the associated risks in a timely manner may have some inherent financial impact.

7. Stakeholder/Community Impact

7.1 IA findings are raised as a result of control gaps or deficiencies identified during audits. If agreed management actions are not implemented to support closure of Internal Audit findings, LPF will be exposed to the risks set out in the relevant IA reports.

8. Background reading/external references

8.1 Public Sector Internal Audit Standards

9. Appendices

Appendix 1 Internal Audit Annual Opinion Definitions

Appendix 2 Limitations and responsibilities of internal audit and management responsibilities

Appendix 3 LPF reviews completed between 1 April 2017 and 31 March 2018

Appendix 4 Status of LPF Internal Audit Findings

Appendix 5 Final report - Unlisted investment valuations and application of fund administration fees and charges

Appendix 6 Final report - Stock Lending

Appendix 7 Final report - Unitisation

Appendix 1 – Internal Audit Annual Opinion Definitions

The PSIAS require the provision of an annual Internal Audit opinion, but do not provide any methodology or guidance detailing how the opinion should be defined. We have adopted the approach set out below to form an opinion for Lothian Pension Fund.

We consider that there are 4 possible opinion types that could apply to LPF. These are detailed below:

1 Adequate *An adequate and appropriate control environment and governance and risk management framework is in place enabling the risks to achieving organisation objectives to be managed*	**2 Generally adequate but with enhancements required** *Areas of weakness and non-compliance in the control environment and governance and risk management framework that that may put the achievement of organisational objectives at risk*
3 Significant enhancements required *Significant areas of weakness and non-compliance in the control environment and governance and risk management framework that puts the achievement of organisational objectives at risk*	**4 Inadequate** *The framework of control and governance and risk management framework is inadequate with a substantial risk of system failure resulting in the likely failure to achieve organisational objectives.*

Professional judgement is exercised in determining the appropriate opinion, and it should be noted that in giving an opinion, assurance provided can never be absolute.

Appendix 2 - Limitations and responsibilities of internal audit and management responsibilities

Limitations and responsibilities of internal audit

The opinion is based solely on the internal audit work performed for the financial year 1 April 2018 to 31 March 2019. Work completed was based on the terms of reference agreed with management for each review. However, where other matters have come to our attention, that are considered relevant, they have been considered when finalising our reports and the annual opinion.

There may be additional weaknesses in the LPF control environment and governance and risk management frameworks that were not identified as they were not included in the 2018/19 LPF annual internal audit plan; were excluded from the scope of individual reviews; or were not brought to Internal Audit's attention. Consequently, management and the Committee should be aware that the opinion may have differed if these areas had been included, or brought to Internal Audit's attention.

Control environments, no matter how well designed and operated, are affected by inherent limitations. These include the possibility of poor judgment in decision-making; human error; control processes being deliberately circumvented by employees and others; management overriding controls; and the impact of unplanned events.

Future periods

The assessment of controls relating to the Council is for the year ended 31 March 2019. Historic evaluation of effectiveness may not be relevant to future periods due to the risk that:

- the design of controls may become inadequate because of changes in operating environment, law, regulation or other; or
- the degree of compliance with policies and procedures may deteriorate.

Responsibilities of Management and Internal Audit

It is Management's responsibility to develop; implement; and maintain effective control environments and governance and risk management frameworks that are designed to prevent and detect irregularities and fraud. Internal audit work should not be regarded as a substitute for Management's responsibilities for the design and operation of these controls.

Internal Audit endeavours to plan its work so that it has a reasonable expectation of detecting significant control weaknesses and, if detected, performs additional work directed towards identification of potential fraud or other irregularities. However, internal audit procedures alone, even when performed with due professional care, do not guarantee that fraud will be detected. Consequently, internal audit reviews should not be relied upon to detect and disclose all fraud, defalcations or other irregularities that may exist.

Appendix 3 - LPF reviews completed in 2018/19 and 2017/18

2018/19 Annual Plan	Findings				* Report Rating
Review	**High**	**Medium**	**Low**	**Advisory**	
Unlisted investment valuations and application of fund administration fees and charges	No findings raised				**Adequate**
Stock Lending	No findings raised				**Adequate**
Unitisation	-	1	1	1	**Adequate**
Total Findings Raised	**-**	**1**	**1**	**1**	
Total 17/18 (3 reports)	*4*	*3*	*4*	*1*	

* Note that report ratings were introduced in the 2018/19 IA plan year.

2017/18 Annual Plan	Findings			
Information Governance	-	2	3	1
Review of IT Business Resilience and Disaster Recovery	2	-	-	-
* Information Security Due Diligence for Payroll Outsourcing	1	-	1	-
Pensions Tax Lifetime and Annual Allowances	1	1	-	-
Total Findings Raised	**4**	**3**	**4**	**1**
Total 16/17 (3 reports)	1	2	4	-

* This was an additional review added to the plan at the request of LPF.

Appendix 4 – Status of LPF Internal Audit Findings as at 31 March 2019

Review	High	Medium	Low	Status - 31st March 2019	Days / Months Overdue at 31/03/19	Status - 20th May 2019
IT Business Resilience and Disaster Recovery	1	-	-	Overdue – original due date was 30/06/18 Implemented – evidence provided to Internal Audit for review 21/03/19	9 months / 274 days	Closed
	1	-	-	Overdue – original due date was 28/02/18	13 months / 296 days	Implemented - evidence provided to Internal Audit for review 18/04/19
Pensions Tax	1	-	-	Overdue – original due date was 23/04/18 Implemented – evidence provided to Internal Audit for review 22/02/19	11 months / 342 days	Rejected by IA 17/04/19 Implemented again 10/05/19 and with IA for review
Cyber Security	-	1	-	Overdue - original due date was 30/09/17	18 months / 547 days	Implemented – evidence provided to Internal Audit for review 10/05/19
Information Governance	-	-	1	Overdue – original due date was 28/02/18	13 months / 396 days	Implemented - evidence provided to IA for review 09/04/19 and now closed.
Pensions Payroll Outsourcing	-	-	1	Overdue – original due date was 29/06/18 Implemented – evidence provided to Internal Audit for review 21/11/18	9 months / 275 days	Implemented – with IA for review
Total	**3**	**1**	**2**	**All findings were overdue at 31 March 2019** **Evidence had been provided to IA for 2 High and 1 Low rated findings.**		
Total 17/18	*4*	*2*	*1*	*One High and one Medium rated findings were overdue at 31 March 2017*		

EDINBVRGH
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The City of Edinburgh Council

Internal Audit

Lothian Pension Fund – Unlisted Investment Valuations and Application of Fund Administration Fees and Charges

Final Report

31st May 2019

RES1810

Overall report rating:

Adequate	An adequate and appropriate control environment and governance and risk management framework is in place enabling the risks to achieving organisation objectives to be managed

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THE CITY OF EDINBURGH COUNCIL

Contents

This internal audit review is conducted for the Lothian Pension Fund under the auspices of the 2018/19 internal audit plan approved by the Pensions Audit sub Committee in March 2018. The review is designed to help Lothian Pension Fund assess and refine its internal control environment. It is not designed or intended to be suitable for any other purpose and should not be relied upon for any other purpose. The City of Edinburgh Council accepts no responsibility for any such reliance and disclaims all liability in relation thereto.

The internal audit work and reporting has been performed in line with the requirements of the Public Sector Internal Audit Standards (PSIAS) and as a result is not designed or intended to comply with any other auditing standards.

It is management's responsibility to design, implement and maintain an effective control framework, and for the prevention and detection of irregularities and fraud. This is an essential part of the efficient management of the Lothian Pension Fund. Communication of the issues and weaknesses arising from this audit does not absolve management of this responsibility. High and Critical risk findings will be raised with senior management and elected members as appropriate.

1. Background and Scope

Background

Unlisted Investments

The Lothian Pension Fund (LPF) investment strategies note that LPF holds unlisted equity and debt investments within the portfolio of pension fund investments. As there is no open market value for the unlisted investments, LPF must ensure there are accurate and robust valuation processes in place to value unlisted investments for inclusion in the periodic financial reporting and the LPF financial statements.

The International Private Equity and Venture Capital Valuation (IPEV) Guidelines puts forward recommendations, intended to correspond to current best practice, on the valuation of private equity and venture capital investments. In particular, Section 4 provides guidance on measuring the fair value of an interest in a fund. LPF uses a web based system provided by Northern Trust (LPF's custodian) to perform the unlisted investment valuation process Consequently, reliance is placed on this system for completeness and accuracy of reporting.

One option commonly used across financial services to obtain assurance on the adequacy and effectiveness of services provided by third parties is through provision of International Standard for Assurance Engagements (ISAE) 3402 service organisation control (SOC) reports from suppliers. This standard is designed to provide customers with assurance that suppliers operate adequate and effective service delivery or technology provision internal controls. ISAE 3402 assurance work is commissioned annually by the service provider; is performed by an independent auditor (usually a professional services firm); is tailored to cover a range of controls; and the final report is provided free of charge to the organisation's customers. Further information is available at ISAE3402.

To calculate current fund valuations, LPF place reliance on the most recent unlisted investment valuations provided by the external fund managers. Assurance on the unlisted investment valuation processes applied by fund managers is obtained through annual ISAE3402 controls reports for each of the external fund managers provided to NT.

The key control operated by LPF to confirm accurate valuation of investments is the quarterly reconciliation performed between the fund valuations spreadsheet maintained by LPF to support daily management of funds, and statements provided by fund managers.

LPF updates the fund valuations spreadsheet to reflect fund cash flows including income; operating expenditure; and the carried interest (performance fee), to support calculation of the change in the fund's net asset value. This data is sourced from monthly bank reconciliations uploaded by external fund managers into the NT system via the Passport portal; the NT cash movement schedule report; and a NT capital report that details all valuations; distributions; and capital calls made during a specific financial quarter.

The reconciliation performed by LPF involves comparing the quarterly statements provided by the external fund manager (included in the NT cash movement schedule report) to the value calculated separately by LPF and recorded in the fund valuations spreadsheet.

Administration Fees and Charges

Pension scheme administration charges cover the cost of administering pension schemes and investing contributions, and can include annual management charges; charges applied to switching

between funds; use of allocation rates where a specified proportion of funds received is not invested and retained to cover administration costs; and pension transfer charges.

The LPF pension administration strategy states that the costs of administration, including actuarial fees for routine work, are charged directly to the fund, and are taken into account when assessing employers' contribution rates.

It also notes that where additional services (actuarial or other) are required and costs are incurred by the LPF, the employer is required to reimburse LPF for the costs involved. Where appropriate, an estimate is provided and the employer's agreement obtained before proceeding to instruct the service provider.

All administration fees and charges are calculated and applied paid based on standing data maintained in the NT pension administration system. As with unlisted investment valuations, reliance is placed on this system for completeness and accuracy of reporting.

Scope

The scope of this review was to assess the design adequacy and operating effectiveness of the key controls supporting the valuation process for LPF unlisted investments, and the completeness and accuracy of fund administration fees and charges for the period 1 April 2018 to 31 March 2019.

Limitations of Scope

The scope of this review only considered the valuation process adopted by the LPF for unlisted investments within the portfolio, with sample testing of individual unlisted investments.

Reporting Date

Our audit work concluded on 31 March 2019 and our opinion is based on the conclusion of our work as at that date.

Approach

The approach applied during our review involved:

Unlisted Investments

- confirming that the unlisted investments valuation process applied by LPF is aligned with applicable International Private Equity and Venture Capital Valuation (IPEV) guidelines;
- assessing the design adequacy and operating effectiveness of established processes and controls to support extraction and management of information from the NT system by LPF;
- re-performing the LPF valuation process for a sample of sixteen unlisted investments to confirm the accuracy of the fund valuations spreadsheet; and
- reviewing the reconciliation performed between the net asset values of the funds calculated using the LPF fund valuations spreadsheet to the net asset values of the fund recorded in the statements provided by external fund managers as at 31 March 2019. This test was performed for those funds that included the sixteen unlisted investments selected for sample testing.

Administration Fees and Charges

- review of the governance and oversight processes applied to the review and approval of administration fees and charges applied;
- review of the content of a sample of 16 agreements established with fund managers that detail applicable pension fund charges to confirm their completeness and accuracy;

- confirming that all fund administration fees and charges detailed in the schedule maintained by LPF agreed to the standing data in the NT pension administration system
- review of a sample of 25 pension scheme charges (including annual management and pension transfer charges) to confirm that fee rates include in the NT system had been accurately applied; and
- recalculation of a sample of 3 stock lending fees and review of supporting documentation to confirm their completeness and accuracy.

2. Executive summary

No Internal Audit findings have been raised.

Opinion

Unlisted Investments

Our review of the Lothian Pension Fund (LPF) unlisted investments valuation process confirmed that an appropriate control environment and governance and risk management framework has been established and is operating effectively to ensure that unlisted equity and debt investments within the portfolio of pension fund investments are appropriately valued by external fund managers in line with International Private Equity and Venture Capital Valuation (IPEV) guidelines.

We also noted that the design of the unlisted investment valuation process applied by LPF, where reliance is placed on ISAE3402 control reports provided by external fund managers to Northern Trust (LPF's custodian), is aligned with best practice across the wider pensions industry.

Recalculation of valuations for a sample of sixteen unlisted investments (using the established LPF valuation process) confirmed that all valuations were supported by detailed calculations and supporting documentation, and had been accurately reconciled to fund net asset values recorded in the statements provided by external fund managers.

Administration Fees and Charges

Our review of the approval; agreement; and application of pension fund administration fees and charges also confirmed that an appropriate control environment and governance and risk management framework has been established by LPF and is operating effectively, ensuring that fees and charges are reviewed and approved; agreed with fund administrators; and completely and accurately applied.

We confirmed that the schedule of charges maintained by LPF was aligned with the content of agreements established with fund administrators and the standing data maintained in the Northern Trust system.

Our review of a sample of 16 agreements established with fund administrators highlighted that these had been appropriately signed on behalf of LPF by either the Chief Executive; Chief Finance Officer; Chief Investment Officer; or Chief Risk Officer.

A sample of 25 administration and 3 stock lending fees applied to the fund were selected for review. We confirmed that these had been accurately applied and were supported by detailed calculations; invoices; and other relevant supporting documentation.

The City of Edinburgh Council

Internal Audit

Lothian Pension Fund – Stock Lending

Final Report

21st May 2019

RES1812

Overall report rating:

Adequate	The control environment and governance and risk management frameworks have been adequately designed and are operating effectively, providing assurance that risks are being effectively managed and organisational objectives should be achieved.

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Contents

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The internal audit work and reporting has been performed in line with the requirements of the Public Sector Internal Audit Standards (PSIAS) and as a result is not designed or intended to comply with any other auditing standards.

Although there are a number of specific recommendations included in this report to strengthen internal control, it is management's responsibility to design, implement and maintain an effective control framework, and for the prevention and detection of irregularities and fraud. This is an essential part of the efficient management of the Lothian Pension Fund. Communication of the issues and weaknesses arising from this audit does not absolve management of this responsibility. High and Critical risk findings will be raised with senior management and elected members as appropriate.

1. Background and Scope

Background

Stock lending enables investors to extract a return on their securities by lending those assets, for a fee and an agreed period, to other investors (counterparties). Approved counterparties are typically institutional investors, such as investment banks or brokers, and a third party agent is contracted to arrange the terms of the stock lending deal. Stock lending fees are normally determined by the demand for, and supply of, the relevant stock in the market.

Stock Lending in the U.K. is regulated by the Financial Conduct Authority (FCA), with rules and guidance included at *'COLL 5.4 Stock lending'* section of the *FCA handbook*. Additionally, regulation 14 and Schedule 1 of the *Local Government Pension Scheme (Management and Investment of Funds) (Scotland) Regulations 2010*, also limits the amount of stock lending that can be performed by local government pension schemes.

Whilst LPF participates in stock lending arrangements, it is a small element of their investment activities, with associated income generating between 0.5% and 2.5% of annual investment income over the past 5 years, and stock lending is also not one of the LPF's key investment performance measures.

LPF management has advised that there are no specific investment strategy restrictions on the type of securities to be used in stock lending arrangements.

The LPF stock lending process is outsourced to Northern Trust (NT), which is also the fund's custodian. Under the terms of the stock lending contract between NT and LPF, NT signs stock lending agreements with approved counterparties (following appropriate counterparty risk; due diligence; and creditworthiness assessments) on behalf of LPF, and performs collateral management. Any proposed change to the approved counterparty list requires approval from LPF.

Whilst NT is contractually bound for ensuring that LPF stock lending arrangements remain compliant with applicable regulations and legislation, LPF remains ultimately responsible for ongoing regulatory and legislative compliance. Whilst NT is contractually responsible for ensuring that LPF stock lending arrangements remain compliant with applicable regulations and legislation, LPF retains the risk associated with potential breaches, and will be accountable to the relevant authorities. As a result, LPF must maintain ongoing oversight of NT stock lending activities to ensure that they remain compliant, and that any breaches are identified; reported and resolved in a timely manner.

All stock lending arrangements are fully collateralised by AAA-rated stocks, or Organisation for Economic Co-operation and Development (OECD) countries issued government debt. LPF can also recall 'loaned' securities at any point of time.

The stock lending contract with NT also includes appropriate indemnities which cover the cost of any losses or damages due to NT failing to meet its contractual obligations.

As LPF has a custodial responsibility for all fund assets (regardless of whether they are subject to stock lending arrangements), it is essential that stock lending arrangements and operational processes are adequately designed and operate effectively to mitigate the associated counterparty; market; and reputational risks.

Scope

The scope of this review was to assess the design adequacy and operating effectiveness of the key controls established by LPF to manage the counterparty; market; reputational; and supplier

management risks associated with stock lending, and to consider the effectiveness of management's governance and oversight of the stock lending process.

Sample testing covered the period from 1st April 2018 to 31st March 2019.

Limitations of Scope

Valuation of stocks subject to stock lending was specifically excluded from the scope of this review.

Reporting Date

Our audit work concluded on 28th April 2019, and our findings and opinion are based on the outcomes of our testing at that date.

2. Executive summary

Total number of findings: 1

Summary of findings raised	
Advisory	1. Stock lending - accounting process guidelines

Opinion

Our review confirmed that the control framework supporting operation of the LPF stock lending process has been adequately designed and is operating effectively, providing assurance in relation to LPF's compliance with relevant Financial Conduct Authority and Local Government regulations, and effective management of the risks associated with stock lending.

Our review confirmed that:

Supplier Management

- The NT contract had been appropriately extended, in accordance with the City of Edinburgh Council procurement requirements, in August 2016 for a period of 3 years;
- The NT stock lending contract services provides LPF with appropriate recourse to NT in the event of regulatory breaches or financial loss;
- LPF management regularly receives detailed information re stock lending operations from NT, and use it to perform assessment of ongoing supplier performance; and
- The value of collateral (always >100% of the value of loaned stock); its credit rating (AAA rated securities and OECD countries issued bonds only); and daily of collateral management processes provide reasonable assurance on the market and credit risks associated with stock lending operations.

Operational processes and procedures

- Our sample testing of stock lending transactions for two months confirmed that they were processed completely and accurately, and were recorded in the correct financial period;

- The stock lending agreement requires NT to perform adequate due diligence before proposing a change to the approved stock lending counterparty list. LPF reviews the change proposals (which do not include details of the diligence performed by NT) and can reject the proposal.

Our review of the stock lending accounting process highlighted that there is currently no supporting process documentation. We did confirm that the process could be easily determined by following the audit trail for prior periods.

Consequently, only one Advisory rated finding has been raised. Further details are included at section 3 below.

3. Detailed findings

1. Accounting Process Guidelines	Advisory
The accounting processes supporting stock lending operations has not been documented. Management has advised that stock lending transactions are relatively easy to process and that a new team member can process the transactions using prior period details, and that there is limited risk associated with lack of documented processes.	
1.1 Accounting Manual	
LPF should document its stock lending process that covers all aspects of recording and processing the stock lending accounting transactions that is reviewed (at least annually) and updated to reflect legislative; regulatory; and processes changes. A documented process would also support training for new employees.	
Agreed Management Action	
We (LPF) wish to place on record our thanks to the IA team for their work in reviewing stock lending and the assurance provided. The advisory point is noted and considered to be within appetite for risk given the low criticality of the process and the ease with which it can be followed by a team member with basic accounting skills. We will consider adding some documentation but note no formal tracking of this advisory finding is required and therefore we consider the review to be closed at the point it is accepted by Pensions Audit Sub-Committee.	

Appendix 1 - Basis of our classifications

Finding rating	Assessment rationale
Critical	A finding that could have a: • ***Critical*** impact on operational performance; or • ***Critical*** monetary or financial statement impact; or • ***Critical*** breach in laws and regulations that could result in material fines or consequences***; or*** • ***Critical*** impact on the reputation of the organisation which could threaten its future viability.
High	A finding that could have a: • ***Significant*** impact on operational performance; or • ***Significant*** monetary or financial statement impact; or • ***Significant*** breach in laws and regulations resulting in significant fines and consequences***; or*** • ***Significant*** impact on the reputation of the organisation.
Medium	A finding that could have a: • ***Moderate*** impact on operational performance; or • ***Moderate*** monetary or financial statement impact; or • ***Moderate*** breach in laws and regulations resulting in fines and consequences; or • ***Moderate*** impact on the reputation of the organisation.
Low	A finding that could have a: • ***Minor*** impact on operational performance; or • ***Minor*** monetary or financial statement impact; or • ***Minor*** breach in laws and regulations with limited consequences; or • ***Minor*** impact on the reputation of the organisation.
Advisory	A finding that does not have a risk impact but has been raised to highlight areas of inefficiencies or good practice.

The City of Edinburgh Council

Internal Audit

Lothian Pension Fund - Unitisation (Employer Asset Tracking)

Final Report

27 May 2019

RES1811

Adequate	The control environment and governance and risk management frameworks have been adequately designed and are operating effectively, providing assurance that risks are being effectively managed and organisational objectives should be achieved.

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The internal audit work and reporting has been performed in line with the requirements of the Public Sector Internal Audit Standards (PSIAS) and as a result is not designed or intended to comply with any other auditing standards.

Although there is a number of specific recommendations included in this report to strengthen internal control, it is management's responsibility to design, implement and maintain an effective control framework, and for the prevention and detection of irregularities and fraud. This is an essential part of the efficient management of the Lothian Pension Fund. Communication of the issues and weaknesses arising from this audit does not absolve management of this responsibility. High and Critical risk findings will be raised with senior management and elected members as appropriate.

1. Background and Scope

Background

LPF investment assets are grouped into two investment sub-funds that operate as common asset pools. Each investment sub-fund has a different risk and return profile and with varying levels of exposure in both investment sub-funds, high/medium/low risk investment strategies are established. Lothian Pension Fund (LPF) uses unitisation approach also known as Employer Asset Tracking, to match employers to either a high; medium; or low risk investment strategy, based on their circumstances.

These investment strategies were as at the end of January 2019, one additional strategy, together with also one further sub-fund, is planned to be created with planned merger of Lothian Buses into the fund.

The LPF unitisation process is performed by Hymans Robertson (Hymans) LLP on LPF's behalf. LPF provides Hymans with monthly data that includes investment valuation data to support calculation of unit prices, and details of transactions with employers. Hymans then performs the unit pricing and asset allocation processes using their own Hymans's Robertson Employer Asset Tracker (HEAT) software.

Employers are responsible for ensuring the completeness and accuracy of contributions data provided to LPF. LPF is then required to ensure that the monthly contributions received from employers, and any other adjustments (for example pay-outs and employee transfers) are correctly processed against each of the two sub funds in line with the with the employer's allocation to a given investment strategy. To achieve this, employers are allocated notional 'units' within investment sub-funds. Unit prices are calculated monthly and based on the value of the investments held within the sub funds, the units are either awarded to employers or, surplus units are 'sold' back to the fund depending on the nature of their monthly transactions.

LPF is responsible for the completeness and accuracy of the data provided to Hymans, but in the event of an error arising from inaccurate processing of the data by Hymans, Hymans is liable for any errors resulting from inaccuracies in the unit pricing and asset allocation processes, and are required to compensate LPF for financial consequences associated with their errors.

One option commonly used across financial services to obtain assurance on the adequacy and effectiveness of services provided by third parties is through provision of International Standard for Assurance Engagements (ISAE) 30402 service organisation control (SOC) reports from suppliers. This standard is designed to provide customers with assurance that suppliers operate adequate and effective service delivery or technology provision internal controls. ISAE 3402 assurance work is commissioned annually by the service provider; is performed by an independent auditor (usually a professional services firm); is tailored to cover a range of controls; and the final report is provided free of charge to the organisation's customers. Further information is available at ISAE3402.

Scope

The scope of this review was to assess the design adequacy; operating effectiveness; and security of the key controls supporting unitisation process. The audit also provides assurance on the following key LPF risks:

- Errors or omissions in monthly data provided to actuaries causing errors in the unitisation process;

- Lack of sufficient IT security assurance over the externally hosted applications, increasing the risk of data loss or corruption; and
- Lack of robust supplier management.

Our sample testing covered the period of 1st April 2018 to 31st March 2019.

Limitations of Scope

Whilst the unitisation process is dependent on the input flow via multiple applications (iConnect, Altair, Oracle), this review will only focus on the critical HEAT application provided by Hymans Robertson, as the remaining applications have been included within the scope of both internal and external audits performed for the LPF.

Reporting Date

Our audit work concluded on 14th April 2019, and our findings and opinion are based on the outcomes of our testing at that date.

2. Executive summary

Total number of findings: 3

Summary of findings raised	
Medium	1. Ongoing Hymans Robertson supplier management arrangements
Low	2. Minor typographical error in the Hymans Robertson contract
Advisory	3. Lack of unitisation contingency planning

Opinion

Our review of the LPF unitisation process confirmed that it is supported by an adequately designed control environment that is operating effectively to ensure the complete and accurate calculation of monthly unit pricing and allocate assets across the two investment sub-funds in line with employers' specified investment strategies. Specifically:

- appropriate controls have been established to ensure that data is accurately and completely extracted from source systems; collated by LPF; and transferred to Hymans Robertson Employer Asset Tracker (HEAT) system for calculation of unit prices;
- sufficient due diligence was performed as part of the procurement process prior to finalising the Hymans Robertson contract. This included obtaining responses from Hymans Robertson in relation to established HEAT system controls as part of the tendering process;
- the contract clearly defines the roles and responsibilities of both LPF and Hymans Robertson, and establishes a framework for dispute resolution; and
- the unitisation process is clearly documented in procedural documents that include sufficient details on both the manual and system aspects of the process, and sufficient training has been provided to relevant team members.

Findings raised

Whilst no significant control gaps were identified, we noted that LPF currently has no established supplier management arrangements with Hymans Robertson, and does not obtain ongoing assurance in relation to the security; resilience; change management; and user access controls supporting the Hymans Robertson Employer Asset Tracker (HEAT) system used to perform the unitisation process.

As there is no specific requirement for LPF to perform the unitisation process monthly (unitisation could be performed annually to support provision of annual employer International Accounting Standard (IAS)19 reports); and there is no personal sensitive data included in the HEAT system, one medium rated finding has been raised.

The need for LPF to implement an effective supplier relationship management framework was originally highlighted in the 3rd Party ICT Supplier Risk review (completed November 2016) where a Medium rated finding was raised, and again in the Pension Tax review (completed April 2018) where a High rated finding was raised in relation to use of the Altair system provided by Aquila Heywood to support ongoing pensions administration and pension tax calculations.

Following completion of the 2016 review, LPF accepted an agreed management action to implement a supplier risk management framework. Management has advised that the framework has recently been

implemented and evidence has now been provided to Internal Audit to support closure of both the Medium and High rated findings raised in these reviews.

Our Low rated finding reflects the need to address a minor typographical reference error in the signature page of the Hymans Robertson contract; and an advisory rated finding (with no risk impact) has also been in included, reflecting that LPF currently has no established contingency processes that could be implemented in the event of a long term HEAT system failure.

Our detailed findings and recommendations are included at Section 3 below.

3. Detailed findings

1. Ongoing Hymans Robertson supplier management arrangements	Medium

Initial assurance on the adequacy and effectiveness of the technology security; resilience; and user access controls supporting the Hymans Robertson Employer Asset Tracker (HEAT) system was obtained during the procurement process in (completed in March 2015) from the written responses provided by Hymans as part of the tendering process.

Our review confirmed that there are currently no established supplier management arrangements with Hymans, and that LPF does not obtain ongoing assurance in relation to key HEAT system security controls.

We also noted that when changes were made to HEAT with the transition from FocalPoint to the Data Portal interface between Hymans and LPF, the change was accepted by LPF it with no analysis of the potential risks associated with this change. Additionally, LPF did not request details of the technology security controls established to support the new Data Portal.

Management has advised that Hymans is responsible for ongoing administration of user access rights and has established sufficiently robust IT security arrangements, but we noted that LPF has not performed any ongoing reviews to confirm that only appropriate users have access to the web based Data Portal.

Risks

- LPF has no assurance in relation to the adequacy and effectiveness of the Hymans Robertson Employer Asset Tracker (HEAT) system security controls;
- Unexpected and unidentified issues with HEAT system changes could potentially adversely impact either submission of data, or calculation of unit prices; and
- Former employees or employees who have changed roles may have inappropriate HEAT Data Portal access as the portal is web based and can be accessed via the web without a live Lothian Pension Fund user account.

1.1 Ongoing supplier management arrangements

1. LPF should obtain regular ongoing assurance from Hymans in relation to the security; resilience; and change management controls supporting operation of the Hymans Robertson Employer Asset Tracker (HEAT) system. This could be achieved through receipt of ISAE 3402 / SOC2 or other relevant assurance (for example, Hymans Internal Audit) reports;
2. LPF should request provision details of planned HEAT system changes from Hymans for review and discussion of any potential concerns prior to their implementation, and request confirmation from Hymans that the sufficient testing has been performed and system changes implemented effectively; and
3. The HEAT Data Portal should be added to the list of the systems in the LPF Leavers Checklist, and reviews of system access rights performed at an appropriate frequency.

Agreed Management Action – ongoing supplier management arrangements

We (LPF) have recently taken steps to implement improved supplier management arrangements for Hymans Robertson, and others, including a criticality assessment. This will extend in due course, with the appointment of a technology oversight manager, to periodic due diligence, ongoing oversight and assurance over all activities including service delivery and data security. We will also seek to develop a contingency plan (to the extent it is possible to replicate a customised and proprietary system such as

this) and exit plan. On balance we consider that SOC 2 level assurance is disproportionate to the materiality of the services performed and therefore we do not intend to take this forward but will seek some form of proportionate assurance as part of our overall arrangements.

Indeed, to evidence such, on 20 May 2019, LPF received a detailed assurance response from the supplier, which is detailed below. Please note that this was received post conclusion of Internal Audit fieldwork and accordingly has not been reflected in the Internal Audit findings.

1. System security controls i.e. requirement to keep unique/complex password and requirement to change it regularly within certain periodicity
    - All user access to Hymans Robertson LLP information systems is authenticated by a unique user ID and password scheme assigned for each individual.
    - For Hymans employees, password complexity and history is enforced ensuring avoidance of easily guessed passwords and password re-use and passwords are forced to change every 90 days.
    - We keep our security controls under ongoing review and in particular we are currently considering the next generation of user access controls.
2. New joiner access controls – how do you assign a level of system access to individuals based on their roles and responsibilities, and have toxic access rights combinations been considered?
    - For Hymans employees we have a joiners/leavers/movers policy which controls the users access rights. We employ role based authentication where employees are only given access rights to data/areas necessary for their job role.
    - For users that are not employees of Hymans, new users can only be set up centrally by our IT Application Operations team. Any requests are made by the relevant client team and require approval by a senior member of the client team.
3. Ongoing review of access rights: Do you, on a certain defined periodicity, generate the user listing and send it to clients to review the access rights?
    - We carry out an annual review through our client teams to review the relevance and correctness of access rights.
4. Leavers: If there have been any leavers in the past year; what's the process to ensure that their access rights are revoked on/soon after their last date and the associated rights.
    - When notified of a leaver, our client teams will raise a request with our central IT operations team. This is usually actioned within a few hours.
    - For Hymans employees, the Firms Joiners/Movers/Leavers Policy controls access rights.
    - A leavers form will be submitted to the IT team from the leavers line manager instructing us to remove access on agreed leaving date.
5. List of current users – please provide a list of current users
    - Attached is a spreadsheet detailing those with access to either Focalpoint or the dataportal. There is a separate tab for each application with the relevant list of users. (note - Attachment has been provided separately to Internal Audit).

Prior to this most recent confirmation, in June 2017, LPF received the following assurance from Hymans Robertson:

- "Governance – our information security programme is sponsored by our Managing Partner. We have a dedicated Information Security Manager and Risk Group in place, which includes senior

management. The Risk Group meets monthly to ensure that business risks, including information security, are appropriately identified and manage. Day-to-day responsibility for procedural matters, maintenance and updating of documentation, promotion of security awareness, liaison with external organisations, incident investigation, management reporting etc. rests with the Information Security Manager.

- Data handling processes and procedures – all staff are required to adhere to our information management and data protection policy and ensure compliance with the Data Protection Act. All of our employees have unique user IDs and passwords to access our systems. IPsec encryption is employed for remote access by employees, with 3rd party remote access limited to specific systems via SSL and/or Site to Site VPN's (as required by the application). All client data is located on protected file servers which are stored in secure rooms, entry to which can only be gained via a combination locked door. Physical access to our offices is restricted, with swipe card systems in place to restrict access to staff only. Desks are cleared of confidential information at the end of each day, with all client files returned to lockable filing systems in all of our offices.
- Information Exchange Security - all internal and external communication is secured behind leading industry firewalls with policy rule enforcement preventing unsolicited intrusion from external sources to internal data. Email borne viruses, spam and junk mail are filtered before they reach the network by email hardware appliances, whilst email encryption secures sensitive document transmission to and from target addresses when applicable. Employee laptops and USB storage devices are fully encrypted.
- External data and system protection – we use multiple primary and back-up internet links protected by industrial grade firewall technologies. All external email is routed via the relevant gateways, each located in a secure area, which run a series of checks including whether the message is virus free. E-mail encryption is certified to FIPS 140-2 standards.
- Information Security Management System ("ISMS") – our system is accredited under ISO/IEC 27001:2013, the international standard for establishing, implementing, maintaining and continually improving an information security management system. All staff are trained on our information security policies.
- On-line applications - unless requested otherwise by a client we use focalPOINT, a secure web-based repository for exchanging confidential data and storing documents. Access to all of our on-line applications is secured by a unique user ID and password, maintained by us on clients' behalf, with the user session encrypted via a Secure Sockets Layer (SSL) certificate. All publicly accessible entry points are protected by industry standard firewalls running intruder protection services.
- Audits and control checks – we run a number of external checks on our security processes. These include annual reviews by an independent ISO 27001 accreditor, annual internal controls assurance audits by a firm of Chartered Accountants and regular penetration testing by an external consultancy to identify any areas of vulnerability."

Obviously, LPF does have an ongoing and long-standing contractual relationship with Hymans Robertson for the provision of actuarial services and the functionality provided by the HEAT is now very much integrated with that supply. For actuarial services, a detailed "Contract management and handover report", dated 21 November 2018, has been signed by relevant officers from both the Council's Commercial and Procurement Services and LPF.

Owner: Stephen Moir, Executive Director of Resources **Contributors:** Hugh Dunn, Head of Finance; Doug Heron, Chief Executive Officer, Lothian Pension Fund; John Burns, Chief Finance	**Implementation Date:** 01 July 2020

Officer, Lothian Pension Fund; Esmond Hamilton, Financial Controller, Lothian Pension Fund	

2. Minor typographical error in the Hymans Robertson contract	Low

Our review identified a minor typographical error between the contract reference numbers included in the terms and conditions and signature pages of the LPF contract with Hymans Robertson.

The contract reference on the terms and conditions page is 'CT96**9**3' whilst the signature page reference is 'CT96**6**3'.

The signature page is the only part of the contract bearing the signatures of both parties, with a reference to the agreed contract terms and conditions.

Risk

Potential impact on the legal enforceability of the contract in the event of a dispute.

2.1 Addendum to the contract

- LPF should redraft the signature page of the contract to include the correct reference, and request Hymans Robertson to sign the revised copy of the contract signature page; and
- The revised signature page should be included as an addendum to the original contract.

Agreed Management Action

While we consider that the typographical error is immaterial in nature and any legal interpretation of the contract would conclude the point to be irrelevant, we promptly addressed the issue by issuing a side letter to the counterparty on the day that this was brought to our attention and subsequently provided evidence of the signed side letter to internal audit within 72 hours. We consider the matter to be closed.

Owner: Doug Heron, Chief Executive Officer, Lothian Pension Fund **Contributors:** N/A	**Implementation Date:** Complete

3. Lack of unitisation contingency planning	Advisory

There are currently no established contingency systems or processes that would enable LPF to perform the unitisation process in the event of a significant (long term) failure of the Hymans Robertson Employer Asset Tracker (HEAT) system.

3.1 Unitisation process contingency planning

LPF should establish and document contingency processes that would be applied in the event of a significant (long terms) failure of the Hymans Robertson Employer Asset Tracker (HEAT) system.

Agreed Management Action

This is an advisory point and we will consider this as part of our overall review of the contingency plans but note no formal tracking is required and therefore consider the audit point to be closed at the point the report is accepted by Internal Audit. Contingency planning could encompass a review of

potential alternative suppliers and, in this context, it is noted that the original procurement process did attract a tender submission from another bidder.

Appendix 1 - Basis of our classifications

Finding rating	Assessment rationale
Critical	A finding that could have a: • ***Critical*** impact on operational performance; or • ***Critical*** monetary or financial statement impact; or • ***Critical*** breach in laws and regulations that could result in material fines or consequences***; or*** • ***Critical*** impact on the reputation of the organisation which could threaten its future viability.
High	A finding that could have a: • ***Significant*** impact on operational performance; or • ***Significant*** monetary or financial statement impact; or • ***Significant*** breach in laws and regulations resulting in significant fines and consequences***; or*** • ***Significant*** impact on the reputation of the organisation.
Medium	A finding that could have a: • ***Moderate*** impact on operational performance; or • ***Moderate*** monetary or financial statement impact; or • ***Moderate*** breach in laws and regulations resulting in fines and consequences; or • ***Moderate*** impact on the reputation of the organisation.
Low	A finding that could have a: • ***Minor*** impact on operational performance; or • ***Minor*** monetary or financial statement impact; or • ***Minor*** breach in laws and regulations with limited consequences; or • ***Minor*** impact on the reputation of the organisation.
Advisory	A finding that does not have a risk impact but has been raised to highlight areas of inefficiencies or good practice.