

# THE UNIVERSITY OF SHEFFIELD ANNUAL REPORT OF THE AUDIT COMMITTEE 2018-19

#### 1. Introduction

The Audit Committee is required by the Office for Students to report annually on its activities to Council and to the President & Vice-Chancellor as the University's accountable officer. This Annual Report, for the 2018-19 session, has been prepared in accordance with the requirements of the OfS Terms and Conditions of Funding for HEIs and builds on the Committee of University Chairs' Handbook for Members of Audit Committees' model format.

The report is presented to Council for consideration and approval.

A copy of the Annual Report has then to be included in the University's annual accountability return to the OfS.

#### 2. Membership

Membership of the Committee during the year was as follows:

Mr Adrian Belton\* 2014-

Professor Shelagh Brumfitt 2015-2019

Mr Kevin Cunningham 2013-

Ms Claire Davis 2016-

Mrs Margaret Ferris 2013- 2019

Mrs Alison Hope\* 2012- (Chair from 1 August 2017)

Mr Richard Mayson\* 2012-

Mr Tony Wray\* 2018-

\*denotes members of the University Council during the period.

There have been no changes in the committee's membership this year but Shelagh Brumfitt and Margaret Ferris have now stood down as external co-opted members. There was one vacancy for a co-opted member, appointed by the Council, and this has been filled from the start of 2019-20 by Mr Andrew Taylor. A further vacancy has arisen in this category and this will be filled in 2019-20.

#### 3. Committee Meetings

The Committee met five times during the session. All the Committee's meetings were attended by representatives of the University's Internal Auditors, PricewaterhouseCoopers (PwC) and its External Auditors, KPMG.

The Provost & Deputy Vice-Chancellor, Chief Operating Officer (until March 2019), Chief Financial Officer and the University Secretary regularly attended meetings of the Committee as observers, as did other members of Professional Service Departments as required. The Committee is grateful for their input.

Over the course of 2017-18 and 2018-19 all Faculty Vice-Presidents have attended a meeting of the committee as observers. This has provided a dedicated space for FVPs to make the Committee aware of key risks and opportunities facing their particular faculty and

discussions have provided a mutual opportunity to gain additional perspective and to broaden the Committee's understanding of particular areas of the University. The Committee has agreed to repeat the programme of attendance on a rolling basis.

Mr David Swinn has acted as Secretary to the Committee and we would like to thank him for his support.

On 18 November 2019 Audit Committee met jointly with Finance Committee, to consider the draft Financial Statements for 2018-19 and KPMG's Audit Highlight Memorandum and Management Letter.

The Audit Committee continues regularly to meet in private, without University staff present. In appropriate cases the external and/or internal auditors attend, in particular on completion of the audit of the financial statements.

#### 4. Terms of Reference and Procedures

There were no changes to the Committee's terms of reference during the year. The Committee continues to work to the Office for Students' guidance, as set out in the Terms and Conditions of Funding and its other regulatory documents, and as elaborated in the CUC's Handbook for Members of Audit Committees in HEIs, and the CUC Higher Education Code of Governance.

In considering internal audit reports the Committee focuses on the most serious findings, being those classified as critical or high risk. In PwC's model, there are overall report classifications of critical, high, medium or low risk, together with individual finding ratings of critical, high, medium, low or advisory, applied as appropriate to impact on operational performance, monetary or financial statement impact, breaches in laws and regulations potentially resulting in material fines or consequences, and impact on institutional reputation or brand. Departmental heads are routinely invited to attend where opinions or findings at critical or high levels are offered in respect of their departments. This allows joint exploration of the issues raised, the management response and the action plan, which will normally have been formulated by the time the audit report reaches the Committee. Recommendations of medium or low priority are taken on a 'by exception' basis.

The formal process of following-up and reporting outstanding audit recommendations has continued. Our internal auditors continue to report to the committee on follow-up work twice a year and the Department of Finance provided regular updates on the implementation status of previous internal audit recommendations.

#### 5. Internal Audit

#### 5.1 Internal Audit Service

The 2018-19 session was the tenth in which the internal audit service was provided by PwC, the second of two possible one-year extensions under the current contract. In February 2019 Council approved the Committee's recommendation, following discussion of options including the timescales involved and agreement from PwC and the other parties who originally tendered for the contract, to extend PwC's contract by a further year, to 31 July 2020 in order to align the contract period for internal and external audit and tender for both services in 2020, to run from August 2020 to July 2023.

The Committee has a responsibility to monitor the effectiveness of Internal Audit. Together with management, it has agreed with PwC a number of Key Performance Indicators for the internal auditors' work, and it reviews these regularly. Process indicators, for example meeting set timescales for delivery of reports, have generally been met during the year and comparative data against previous years was very positive and showed no areas for concern.

#### 5.2 Audit Strategy 2018-19

The Internal Audit strategy and plan for the session was formulated following discussions between PwC and senior University managers, and subsequently with the Committee. The budgeted internal audit input for the year was 250 audit days, comprising 18 planned reviews and two follow-up reviews. In the event 250 days were provided (2017-18: 250).

#### 5.3 Internal Audit Reports 2018-19

Twenty reports have been completed by PwC under the 2018-19 audit plan, including two follow-up reviews. Nineteen were presented during the session and a further report in respect of the session at the meeting in October 2019. A full list of reports is set out in the Internal Auditors' Annual Report.

Seven audits received a low risk classification, which is pleasing and nine reports were classified as medium risk (one of which also included one high risk finding). The Committee was disappointed that there was one high risk report this year; one was also received during 2017-18 and none received during 2016-17. There were no critical findings and 4 high level findings in total. Low level findings have remained consistent at 40, the same as 2017-18. The Committee was disappointed that there was an increase in medium level findings to 29 compared to 16 in 2017-18 however this was still a significant decrease from the peak of 44 in 2015-16. In general, the Committee has welcomed the University's approach to internal audit in terms of directing activity at areas with known or suspected challenges, which may explain the increase in higher risk recommendations.

Reports classified as high risk or containing high risk findings were:

- International Faculty in Greece (high risk rating);
- IT Contingency Planning (high risk rating)

Reports which contained two or more medium risk findings included:

- International Faculty in Greece
- Payment Card Industry Data Security Standard (PCI DSS)
- Research Ethics
- Departmental Health Checks
- Undergraduate Marketing Recruitment
- Governance around 5 IT risks
- GDPR
- Finance Continuous Auditing phase 1
- IT Contingency Planning
- Student Wellbeing and Support Services

In each of these reports, satisfactory management action plans have been agreed and are being implemented. The Committee regularly monitors progress against these plans.

PwC's annual report for 2018-19 (attached) was received by the Committee in final form on 18 November 2019, a draft having been seen in October. Based on the work completed, except for those areas described above, PwC is able to offer reasonable assurance that the University has adequate and effective arrangements covering:

- Governance, risk management and control;
- Economy, efficiency and effectiveness (Value for money) arrangements;

The Committee is pleased to note that a number of areas of good practice have been identified, as set out in PwC's annual report.

In its discussions over the year, the Committee has repeatedly noted the importance of an open and transparent corporate culture as a feature of a strong internal control

environment. This includes compliance matters, such as ethics and whistleblowing and antibribery and anti-corruption, but the impact of cultural factors also extends to business enhancement activity as well as risk management.

#### 5.4 Follow-Up of Internal Audit Recommendations

Significant progress has been made in the last five years on the implementation of Internal Audit recommendations, with the formalisation of a follow-up and reporting process led by Finance, and with testing and verification performed by PwC.

At the last follow-up, of the 43 recommendations assessed by the University as 'Fully Implemented, PwC agreed with this assessment in 24 cases but revised 15 of the recommendations to 'Partially Implemented' and 4 to 'Not Implemented'. For 19 of these changes the rationale was that insufficient evidence had been provided to Internal Audit to enable them to validate the status given by the University.

On the whole, the Committee is pleased with the progress made this year, but will continue to insist on rigorous follow-up of previous recommendations. We continue to encourage the University to help managers understand that internal audit is a management tool that should be used positively.

#### 5.5 Audit Strategy 2019-20

The Audit Committee has considered and approved the draft audit strategy for 2019-20 prepared by the Internal Auditors in consultation with University management. The Internal Auditors have proposed, and the Committee has endorsed, the provision of 250 days in 2019-20 (2018-19: 250).

#### 5.6 Additional Activity by PwC

In addition to their work under the Internal Audit Plan 2018-19, PWC continued work on a number of assignments providing advice on tax matters in relation to international payroll issues. The fees for these additional assignments during 2018-19 totalled £5,760 but will not be charged to the accounts until 2019-20.

PWC also continued work on the 'Identity and Access Management' (IdAM) project. As previously reported at the Committee's October 2018 meeting, PWC were successful in the tender for the implementation phase of this project and further costs of £204,602 were incurred on this during the 2018-19 financial year. The total costs for this phase are expected to be around £600,000. The Committee considered this project in the context of any potential threats to audit independence, which was also discussed by Council. Additional assurances were sought as to the measures PwC would take to ensure that the independence of its audit function would not be comprised. In January 2019 the Committee received a comprehensive letter from PwC explaining its position, and the internal audit progress reports also now include information and updates on the project. Both the Committee, and Council, were appropriately assured.

PWC carried out assurance work on the new Student System Project, including program governance and systems blueprint review. The procurement for this process was covered in the October 2017 report to Audit Committee. Prior to the 2018-19 financial year this assignment had incurred costs of £28,278, and a further £54,000 was incurred in the 2018-19 financial year.

During 2018-19 PwC also carried out a review of the operation of Print Services within the University at a cost of £25,832 and were engaged to participate in a UEB Away Day to discuss major change programmes and capital governance at a cost of £5,618.

#### 6. External Audit

#### 6.1 External Audit Service

KPMG continue to provide the University's external audit service, having been appointed by competitive tender in July 2002, March 2007, June 2011 and again with effect from 1 January 2017 for three years with the option to extend the contract for a further two years, subject to satisfactory annual review of performance. As noted in section 5.1, above, Council have approved a recommendation to align the contract periods for internal and external audit services, which will both now terminate in July 2020 to allow a consecutive tender to be undertaken in 2020 for contracts commencing on 1 August 2020.

The annual external audit fee for 2018-19 is a lump sum fee in accordance with the original contract. It is subject to increases in line with the Retail Price Index and for any additional work carried out that was not included within the contract.

In January 2019 the Committee considered a review to evaluate the performance and effectiveness of the University's external auditors. Feedback on a number of themes was sought from Audit Committee, the Department of Finance and principal audit contacts at the University subsidiary companies. Broadly positive responses had been received. Written and verbal feedback was provided to KPMG on a number of issues, including communication with University representatives.

#### 6.2 Additional Activity by KPMG

In 2018-19 KPMG provided tax advice services to the University totalling £37,620 with some of this to be charged in the 2019-20 financial year. Other additional services for the University totalled £63,260, these included £45,500 for European Framework grant audits, £4,620 for a US Government grant audit and advice on an investment manager tender.

KPMG have also been appointed to carry out an assignment advising the University in relation to a University subsidiary company Castings Technology International Ltd (CTI Ltd). The work is expected to cost around £51,600 including VAT. The proposal to use KPMG for this assignment was agreed with the Chair of Audit Committee before the appointment was made.

#### 6.3 External Audit Highlights Memorandum and Management Letter

On 18 November 2019 the Audit and Finance Committees met jointly to consider the Financial Statements for 2018-19 and the External Auditor's Audit Highlights Memorandum and Management Letter. Audit Committee then discussed the audit aspects of the Statements, Finance Committee having already signed them off, and agreed to recommend the Statements to Council. Audit Committee also approved the Statement of Corporate Responsibility for inclusion in the University's Annual Report.

The Committee considered the External Audit Strategy Memorandum for the year ending 31 July 2019. The main areas of risk were identified as valuation of fixed assets, fraud from revenue recognition, pensions liabilities and management override of controls. The Committee was content with the overall strategy.

On 18 November 2019 the Committee received the External Audit Highlights Memorandum and Management Letter relating to 2018-19, which stated that the audit was now substantially complete and KPMG were able to report in their opinion that the financial statements:

- Give a true and fair view of the state of the affairs of the Group and University as at 31 July 2019 and of the Group's income and expenditure, recognised gains and losses and cash flows for the year then ended;
- Have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and

Have been prepared in accordance with the Statement of Recommended Practice:
 Accounting for Further and Higher Education.

#### 7. Other Activities

#### 7.1 Impact

In respect of its own performance the Committee considers that it has directed the internal audit function towards areas relevant to the risks facing the University. It has constructively challenged senior management and the internal audit function and has welcomed the level of cooperation and support received. Responses to audit recommendations are generally positive and timely in terms of both strict compliance matters and business enhancement – the added value that the Committee aims to deliver in discharging its responsibilities.

#### 7.2 External Audit

In March 2019 the Committee received a report from the Finance Department on progress made against recommendations arising from the External Auditors' audit highlights memorandum. At that time, although the vast majority of recommendations from previous years were confirmed as either fully implemented, closed or no longer relevant, none of the 3 recommendations raised in 2018-19 were yet fully implemented. It was noted that not all outstanding recommendations were classed as overdue at the review point and some were partially implemented. The Committee were assured about the high evidential standard to which action owners were held in order to formally close a recommendation.

#### 7.3 Corporate Risk

The Committee has continued to review the University's Corporate Risk Register at regular intervals and in line with usual practice a number of audit reports performed in this academic year required testing of risk management issues. In October 2019 the Committee also considered a review on the operation of the University Code of Ethics, which was introduced at the end of 2016-17 to replace the previous arrangement and built on the findings of a high risk internal audit report and follow-up discussions in 2015-16. This was presented to Council in October 2018 along with proposed amendments to the Code and related follow-up work. The Committee receives an annual update on the use of the University's Whistleblowing policy and fraud response plan; changes to the Whistleblowing policy requested in 2018 have now been implemented with the University Secretary and Chair of the Audit Committee now being notified of any qualifying disclosures where appropriate. The Committee routinely receives assurance from the University's Animal Welfare and Ethical Review Body and where appropriate the Committee receives relevant external reports such as the OfS assessment of institutional risk.

#### 7.4 Briefings

Throughout the year the Committee has received regular briefings and updates on significant developments in the sector and their implications, including through the Vice-Chancellor's periodic reports to Council being made available to Members. The Committee has also been kept up to date about ongoing work to comply with OfS' requirements.

#### 8. Audit Committee Opinions

#### 8.1 Overview

The Committee is required to offer its opinion on the adequacy and effectiveness of the University's systems for risk management, control and governance, on economy, efficiency and effectiveness (value for money) and on the management and quality assurance of data submitted to HESA, the Student Loans Company, the OfS, Research England and other bodies on the basis of all the information that has been placed before it, including management responses to audit reports. On this basis the Committee has considered what opinions it is able to offer Council. We are satisfied that the internal audit work carried out

by PwC meets the required standards and provides an appropriate basis for the Committee's own assurances to Council.

#### 8.2 Risk Management, control and governance

The University's internal audit strategy continues to be based on risk assessment, drawing on the University's Corporate Risk Register. The Committee notes the opinion of the internal auditor, PwC, that based on the work PwC has completed, subject to specific weaknesses identified in audit reviews and PwC's annual report, the University has adequate and effective arrangements in place to support the achievement of management's objectives over:

- Risk management, internal control and governance; and
- Economy, efficiency and effectiveness/Value for money processes.

The Audit Committee and Council continue to receive and consider regular reports on major corporate risks. The Committee has seen and accepts the statements on corporate governance and internal control, and on public benefit, included in the Financial Statements for 2018-19.

The Committee is of the opinion that the University's arrangements for risk management and internal control and governance (subject to the matters described in the 'Summary of Findings' section of PwC's annual report, attached) are adequate (i.e. suitably designed) and effective (i.e. the controls are operating as designed).

#### 8.3 Economy, Efficiency and Effectiveness (Value for Money)

The Audit Committee exercises a monitoring role in relation to value for money, to ensure the University maintains adequate and effective arrangements. The Internal Auditors take account of value for money issues as part of their routine system-based auditing, with any relevant issues being examined and reported. Internal audit reports explicitly address, and report on, VfM. In the 2018-19 session a number of reviews included VfM themes within the audit objectives, such as Research Ethics, Student Wellbeing & Support, Departmental Health Checks, IT Contingency Planning and subsidiary companies (SUEL).

The University's Financial Operating Strategy identifies the adoption of a VfM Strategy as a financial objective for the University, and in 2010-11 the University adopted a Value for Money Strategy. This strategy contains seven VfM objectives and a series of actions identified as a mechanism for achieving these objectives. Although the submission of the Annual VFM Report to the OfS is no longer a requirement, as it was for HEFCE, the University's registration with the OfS does requires it to make certain assurances and meet specific evidence requirements in relation to VfM. The University chose to produce an Annual VFM Report this year to reflect good practice, to help Audit Committee form their opinion on the achievement of VFM in the University and to acknowledge the ongoing focus on "value" that will remain important for the OfS. The report was also provided to the Finance Committee and Council for information. The Audit Committee received the report in October 2019. The Committee welcomed the report as a positive piece of work which facilitates continuous improvements in delivering value for money in all areas of the University.

In 2018-19 the Committee received an interim report on procurement in June 2019, preceded by an update on procurement activity and related structural change from the Interim Head of Procurement. The Committee received an annual report at its November 2019 meeting. These updates include progress made towards achieving the objectives set in the Procurement Strategy and a summary of planned future activity.

The Committee also now receives the University's annual commercial report, which is reviewed in detail by the Finance Committee.

The Committee is of the opinion that the University's arrangements for economy, efficiency and effectiveness (VfM) are adequate (i.e. suitably designed) and effective (i.e. the controls are operating as designed).

#### 8.4 Management and quality assurance of data

The Committee is also responsible for offering its opinion on the management and quality assurance of data submitted to OfS, HESA, SLC and other funding bodies by the University. The Committee has considered this carefully. The Committee notes that TRAC and TRAC (Teaching) Returns have been prepared in accordance with the principles of the Transparency Approach to Costing and has again received updates from relevant groups and individuals regarding data assurance, including the Data Assurance Group, which provides high level oversight of the University's data assurance processes and its response to the changing data landscape. In October 2019 the Committee was alerted to a recent reportable event that had been notified to the Ofs, in relation to a data validation issue for the institutional HESA submission. The Committee is assured by the remedial action taken and a further review of internal controls and assurance mechanisms to ensure compliance with any future changes in reporting requirements. Council received a briefing in its October meeting papers.

The Committee is of the opinion that the University's arrangements for the management and quality assurance of data is adequate (i.e. suitably designed) and effective (i.e. the controls are operating as designed).

November 2019

# Internal Audit Annual Report 2018/19

University of Sheffield Final September 2019





### Contents

1. Executive summary	3
2. Summary of findings	6
3. Internal audit work conducted	12
4. Follow up work conducted	15
Appendices	16
Appendix A: Mapping of internal audit work	17
Appendix B: Basis of our classifications	18
Appendix C: Opinion types	20
Appendix D: Limitations and responsibilities	21

#### **Distribution list**

#### For action:

Chair and Members of the Audit Committee

#### For information:

University Executive Board





**Summary of findings** 

Internal Audit work conducted

Follow up work conducted

**Appendices** 

### **Executive summary**

#### Introduction

This report outlines the internal audit work we have carried out for the year ended 31 July 2019.

The Office for Students' terms and conditions of funding for higher education institutions for the year ending 31st July 2019 require that the Head of Internal Audit provides a written report and annual internal audit opinion to the Audit Committee. As such, the purpose of this report is to present our view on the adequacy and effectiveness of:

- · Governance, risk management and control; and
- Economy, efficiency and effectiveness (value for money) arrangements.

This is achieved through a risk-based plan of work, agreed with management and approved by the Audit Committee, which should provide a reasonable level of assurance, subject to the inherent limitations set out in <a href="Appendix D">Appendix D</a>. The opinion does not imply that Internal Audit has reviewed all risks relating to the organisation.

The Audit Committee agreed to a level of internal audit input of 250 days as set out in our internal audit plan, which have been delivered.

Whilst this report is a key element of the framework designed to inform the Statement of Corporate Governance, there are also a number of other important sources to which the Audit Committee should look to gain assurance. This report does not override the Audit Committee's responsibility for forming their own view on governance, risk management, control and value for money arrangements.

#### Head of internal audit opinion

We are satisfied that sufficient internal audit work has been undertaken to allow an opinion to be given as to the adequacy and effectiveness of governance, risk management and control, and economy, efficiency and effectiveness arrangements (value for money). To assist the Audit Committee in understanding how our work corresponds to their reporting responsibilities, we have mapped our work against these areas in <a href="Appendix A">Appendix A</a>.

In giving this opinion, it should be noted that assurance can never be absolute. The most that the internal audit service can provide is reasonable assurance that there are no major weaknesses in the system of internal control.



Summary of findings

Internal Audit work conducted

Follow up work conducted

**Appendices** 

### Executive summary

#### **Opinion**

Our opinion is as follows:

Satisfactory

### Generally satisfactory with some improvements required

Governance, risk management and control, and value for money arrangements in relation to business critical areas are generally satisfactory.

However, there are some areas of weakness and non-compliance in the framework of governance, risk management and control and value for money arrangements which potentially put the achievement of objectives at risk.

Improvements are required in those areas to enhance the adequacy and effectiveness of governance, risk management and control and value for money arrangements.

Please see our summary of findings in section two of this report.

Major improvement required

Unsatisfactory



**Summary of findings** 

Internal Audit work conducted

Follow up work conducted

**Appendices** 

### Executive summary

An explanation of the types of opinion that may be given can be found in Appendix C of this report.

#### **Basis of opinion**

Our opinion is based on:

- All audits undertaken during the year;
- Any follow up action taken in respect of audits from previous periods; and
- Any limitations which may have been placed on the scope or resources of internal audit.

The commentary below provides the context for our opinion and together with the opinion should be read in its entirety.

#### Commentary

The key factors that contributed to our opinion are summarised as follows:

- Our internal audit work for the year resulted in 18 reviews;
- There were two high risk reports in 2018/19 (2017/18: one report was high risk overall);
- None of the individual assignment reports have an overall classification of critical risk in the 2018/19 year (2017/18: no reviews were critical risk overall):
- We raised four high risk findings during the 2018/19 year (2017/18: two high risk findings);
- Overall there have been 73 findings raised (2017/18: 65), which represents an increase. This
  has been attributable to greater challenge being applied in the Finance Continuous Audits,
  following some amendments to the scope, and inclusion of evolving areas of compliance
  within the 2018/19 plan e.g. around GDPR, which pose a greater inherent risk.
- There are a number of medium risk findings and overall assignment reports which have
  contributed to our view that in forming our opinion, some improvements are required. These
  are set out in the next section 'summary of findings' of this report.

- Our plan included some new themes following the risk assessment conducted at planning; namely around Information Technology governance and contingency planning, Teaching excellence framework, and student well-being. This was with a view to supporting management in establishing what the main control design and operating effectiveness issues were, prior to implementing system and process changes.
- Our broader follow up work showed that the institution has an effective process in place however management should continue to work to ensure progress on due findings especially findings that have been rated high risk.
- We note the positive and constructive conversations we have had with management in agreeing recommendations and action plans. We also recognise the focus being placed on follow-up of recommendations by Audit & Risk Committee.

#### **Acknowledgement**

We would like to take this opportunity to thank the University's management and staff, for their cooperation and assistance provided during the course of our work across this year.



**Summary of findings** 

Internal Audit work conducted

Follow up work conducted

**Appendices** 

# Summary of findings

Our annual internal audit report is timed to inform the organisation's Annual Governance Statement. We completed 18 internal audit reviews. This resulted in the identification of four high, 38 medium and 39 low risk findings to improve weaknesses in the design of controls and/or operating effectiveness. There were also two reviews that were follow-up in nature.

A summary of key findings from our programme of internal audit work for the year work is recorded in the table below:

	Description	<b>Detail</b>
Control weaknesses		We have raised a total of four high risk recommendations during 2018/19 as outlined below:
	Control weaknesses were identified within	International Faculty in Greece
!	the organisation's governance, risk management and control processes. A summary of the high risk findings has been detailed opposite.	• Major Breaches to the Agreement: Anti-bribery and Insurance: The anti-bribery policy of City College, did not sufficiently explain or include information over areas - types of bribery related offences, what constitutes improper performance, who the legislation applies to, the consequences of breaching legislation, the monitoring procedures and controls in place at City College and advice on what to do in certain high risk scenarios. Further, there was no compulsory anti-bribery training for staff, and the informal training delivered, was not monitored to ensure that all staff have participated. Also, City College did not have specific insurance covers being travel and personal accident insurance, money insurance, motor insurance, clinical trials, claims and international students, home students insurance and professional indemnity insurance.
		• University Monitoring of the Management Agreement: The University did not have any monitoring arrangements in place to check if City College complies with management agreement. Given the number and nature of issues identified throughout our audit, we advised that the University considers implementing procedures, whereby various aspects of the management agreement will be reviewed on a periodic basis.
		Information Technology (IT) Contingency Planning
		• IT Disaster Recovery (DR) testing: There has never been an IT DR exercise performed to validate the effectiveness of the existing contingency arrangements, in advance of an actual incident occurring. No formal plan or schedule of tests has been defined.
		• Supplier contingency arrangements: A holistic list of University suppliers is not maintained centrally, with details related to their level of criticality and contingency arrangements in place for the loss of the critical IT suppliers.



**Summary of findings** 

Internal Audit work conducted

Follow up work conducted

**Appendices** 

# Summary of findings

#### **Description**

#### Other weaknesses

Other weaknesses were identified within the organisation's governance, risk management and control processes. A summary of the medium risk findings has been detailed opposite.

#### Detail

We have raised a total of 29 medium risk recommendations during 2018/19. The main themes (amongst others), have been included as examples of some of the main issues within those recommendations:

#### Governance:

We raised findings relating to the maintenance of registers used for record keeping, for example, we noted there is no periodic review of the CiCS departmental risk register (Governance around 5 IT risks), and we noted that departments either did not hold a gifts and hospitality register or did not record any entries in it (Departmental Health Checks review).

#### Policies, procedures and guidance:

We identified areas which lacked formally defined procedures being in place, for example around departments to informing HR of changes to researcher start dates (UKVI Tier 4 review), plans around completion of outstanding compliance tasks (PCI DSS review), and there being no process in place for approval of journals in the finance function. We also identified that CiCS IT Disaster Recovery plan is in draft form (IT Contingency Planning review).

There were also findings raised relating to the understanding of, and adherence to policies and procedures, for example, we noted that with the departments, that although there was a clear understanding of the role undertaken by the Head of Recruitment and Admissions (Undergraduate Marketing Recruitment review), and we noted that students did not meet relevant admission criteria but were still allowed to start their programme of study by the Greek faculty (International Faculty in Greece review). We also identified an instance where the department took action to sanction a student in the context of research methods incorrectly adopted (Research ethics review) however, they did not first consult the University Research Ethics Committee (UREC) .

#### Training:

We raised findings around training either not being in place, or being sufficiently completed across the University, for example, we noted that there is no formal data protection training for individuals carrying out research involving personal data (Research Ethics review), and we noted that average completion rate across departments for mandatory training in relation to Student wellbeing was just 70% (Student Wellbeing and Support review).

#### Information on website:

We identified issues with the content on the University website being outdated, for example, course information from the Undergraduate Marketing Recruitment review, and detail on the counselling service webpage which still shows events that were related to 2017/18 academic year (Student Wellbeing and Support review).



**Summary of findings** 

Internal Audit work conducted

Follow up work conducted

**Appendices** 

# Summary of findings

### buillinary of illianing

#### Description

#### Other weaknesses

Other weaknesses were identified within the organisation's governance, risk management and control processes. A summary of the medium risk findings has been detailed opposite.

#### Detail

#### Access to systems

We raised findings relating to access to systems, namely access to the Payroll system and the Starez system. For the payroll system, we identified two individuals had edit access to payroll system without a valid business reason., and for the StarRez system, we identified a lack of a formal review of such access rights at a regular frequency is not present.

#### Relationships with third parties

We raised findings around the management of third party relationships, for example in the PCI-DSS review, we noted that third parties and suppliers are not completing Attestations of Compliance (AoC) (which provides assurance of a third party or supplier to the University complying with PCI - DSS requirements), and in the GDPR review we identified that the University uses the services of third parties for a variety of functions, however, all third parties are not subject to same level of assurance and due diligence but it is rather dependent on the cost of the third party software applications involvement.



**Summary of findings** 

Internal Audit work conducted

Follow up work conducted

Appendices

# Summary of findings

Description	Detail
Follow up	We carry out our follow up work in two phases. A mid-year follow up was carried out in February 2019, and the findings of this are set out below. Our final follow up work is took place in September 2019.
During the year we have undertaken follow up work on previously agreed	The results of management's own follow-up tracker are summarised on 'Follow up work conducted' section 'of this report.
actions.	In February 2019 and September 2019, we tested all recommendations that management self identified as being fully implemented, and a sample of recommendations which have been assessed by management as partially implemented.
	In Phase one, from our sample of 25 recommendations (8 deemed fully implemented, 14 partially and 3 as no longer relevant).
	In Phase two, from our sample of 43 recommendations (24 deemed fully implemented and 19 partially implemented).
	As at September 2019, 38 of the 49 recommendations assessed by management had been partially implemented and 11 were 'not implemented'.



**Summary of findings** 

Internal Audit work conducted

Follow up work conducted

**Appendices** 

### Summary of findings

#### **Description**

#### **Good practice**

We also identified a number of areas where few weaknesses were identified and / or areas of good practice, in line with the following themes.

#### Detail

#### Overarching governance

- CiCS staff have a consistent understanding and awareness of the CiCS governance structure. Further, monthly project highlight report is detailed and provides a comprehensive overview of the project status, risks and issues, to allow for timely actions.
- Research Ethics are governed by the University Research Ethics Committee, which has established roles and responsibilities, a clear mission in terms of Research Ethics objectives and a well documented overarching Research Ethics policy. Clear guidance also exists for University staff on the expectations of the University in relation to handling of sensitive subjects' data in light of GDPR.
- Regular Board reports on Health & Safety (H&S) are produced by H&S team management to ensure sufficient oversight and monitoring of H&S issues. The University has a clear governance framework for H&S where various committees discuss H&S regularly.
- UKVI compliance Tier 5: Departments are made aware of their responsibilities and HR have oversight of Tier 5 visa applications through use of a
  tracker which lists all Certificate of Sponsorship applications in a given year.
- Medicine, Dentistry and Health Faculty Review: Comprehensive guidance is available to all staff on the University intranet, which details the SRDS
  and promotions process. Also, there are good opportunities available to staff for personal development.
- Undergraduate Marketing Recruitment: Regular SAGSNF meetings are held. The university has representatives within each department for
  marketing and recruitment, which helps to provide autonomy to the faculties. The University is in the process of rolling out a new recruitment
  enquiry records system, known as 'AskUS' which shows a clear effort by the university to improve the service.
- There has been consistent downward communication from the institution, to the departmental level with regards to TEF. Departments are generally
  aware of the Teaching excellence framework (TEF) and have demonstrated their buy in with institution level initiatives to become prepared for
  subject level TEF.
- There is a H&S committee, which regularly meets to discuss on-going plans to minimalize risk for H&S and identifying any serious injuries. The risk
  register for H&S is regularly updated and signed by the Director of H&S and reviewed by the risk review group.

#### Control

- Guidance is issued to casual workers informing them of their responsibilities to submit timesheets.
- Budget holders have sufficient oversight over the expenditure being incurred on their budget code.
- Claims made by staff are challenged by Departmental Manager and payments team exercise skepticism/ caution when establishing new vendors.

**Summary of findings** 

Internal Audit work conducted

Follow up work conducted

**Appendices** 

### 

Summary of findings
<del>_</del>

#### **Description**

#### **Good practice**

We also identified a number of areas where few weaknesses were identified and / or areas of good practice, in line with the following themes.

#### Detail

#### Control

- StarRez system maintains a trail of transactions that student users process and all student applications for accommodation in StarRez had a corresponding record in Ubase to facilitate invoicing. No issues were highlighted on our testing around the completeness and accuracy of transactions recorded in the StarRez system to the Ubase/ CIS system.
- At SUEL (Subsidiary), there is a strong control design framework around purchasing process and managing new supplier set ups/ changes to supplier data, Further, regular/ detailed budget monitoring/ reporting gives the Board and University adequate assurances on the progress.

#### Student engagement/ feedback

- Students are engaged and feedback is obtained through a variety of means to help Departments consider what they might need to do to improve students experience and their TEF score.
- Documentation available to students on their 'Intro weekend' informing them about their accommodation was detailed and user friendly and an einduction course is available to students to help inform them about facilities available in their accommodation. The accommodation office place also their feedback on the StarRez system on a dashboard, which is then collated centrally and acted on where appropriate.
- Presence of strategies specifically relating to student well-being and support, such as the Student Mental Health Strategy, Student Support Strategy and Learning & Teaching Strategy. Monthly meetings are held with heads of student support services to discuss any issues/concerns or any areas of good practice within the service. Performance of each individual service is monitored with services preparing monthly reports specifying KPI data and their performance

#### Induction/ on-boarding and training

- The mandatory staff training for GPPR compliance has been completed by over 90% of staff and the Data Protection Officer (DPO) runs regular GDPR awareness training which all staff can sign up to at anytime. Departments that are understood to be regularly dealing with extremely sensitive personal data have further specialised training and controls around the use and protection of this data.
- Research Ethics policy training workshops can be provided at the discretion of the University Research Ethics Committee.
- The Accommodation Office also have an onboarding induction training programme for new users.
- Supporting the Supporters programme offers training to all staff across a variety of different areas within student wellbeing.
- The University have large induction process when new Elected Officers in the Students' Union come into post to make them aware of what the University is doing and how they can work together.

**Summary of findings** 

**Internal Audit work conducted** 

Follow up work conducted

**Appendices** 

### Internal audit work conducted

#### Introduction

The table below sets out the results of our internal audit work and implications for next year's plan. The following page shows direction of control travel and a comparison of planned and actual internal audit activity.

#### Results of individual assignments

Review	Report	Number of findings					
Review	classification	Critical	High	Medium	Low	Advisory	Total
Governance around 5 IT risks	Medium	-	-	3	1	-	4
General Data Protection Regulation (GDPR) Compliance	Medium	-	-	4	2	1	7
UKVI Compliance – Tier 5	Low	-	-	1	2	1	4
Payment Card Industry – Data Security Standard (PCI-DSS) Review	Medium	-	-	2	3	1	6
Research Ethics	Medium	-	-	3	1	-	4
International Faculty in Greece	High	-	2	2	2	-	6
Teaching Excellence Framework	Low	-	-	-	-	1	1
Undergraduate Marketing Recruitment	Medium	-	-	2	3	-	5
Finance – continuous auditing (Phase 1)	Medium	-	-	3	3	-	6
Finance – continuous auditing (Phase 2)	Medium	-	-	1	6	-	7
Review of the Accommodation System Starez	Low	-	-	1	1	1	3
UUK compliance student accommodation	Low	-	-	-	1	-	1
IT Contingency Planning	High	-	2	2	-	-	4
Health and Safety	Low	-	-	-	2	-	2
Student Wellbeing and Support	Medium	-	-	2	2	-	4

Continued overleaf

Summary of findings

**Internal Audit work conducted** 

Follow up work conducted

**Appendices** 

### Internal audit work conducted

#### Results of individual assignments (continued)

Review	Report			Number of	findings		
Keview	classification	Critical	High	Medium	Low	Advisory	Total
Departmental Health Checks	Medium	-	-	3	4	-	7
Medicine, Dentistry and Health Faculty Review	Low	-	-	-	3	-	3
Subsidiary Review – SUEL	Low	-	-	-	4	1	5
Follow Up review (Phase 1)	N/A	N/A	N/A	N/A	N/A	N/A	-
Follow Up review (Phase 2)	N/A	N/A	N/A	N/A	N/A	N/A	-
		0	4	29	40	6	79

**Summary of findings** 

**Internal Audit work conducted** 

Follow up work conducted

**Appendices** 

### Internal audit work conducted

#### **Direction of control travel**

Finding ratings	Trend between current and prior year	Number of findings				
r munig ratings		2018/19	2017/18	2016/17		
Critical	<b>\</b>	0	0	0		
High	1	4	2	0		
Medium		29	13	22		
Low	<b>—</b>	40	40	33		
Total	1	73	65	55		
Note: in 2018/19, 18 (this excludes follow up reviews) internal audit reviews were carried out in comparison with 18 in 2017/18 and 15 in 2016/17						

Summary of findings

Internal Audit work conducted

Follow up work conducted

**Appendices** 

# Follow up work conducted – February 2019 and September 2019

As part of our 2018/19 operational audit plan, we have undertaken two follow up reviews. The scope of the work was to review the status of outstanding internal audit recommendations reported to the Audit and Risk Committee meeting and, where the recommendations were assessed as implemented by management, to validate this status.

#### **Management self-assessment**

The University completed a self assessment in two phases: Phase 1: February 2019 and Phase 2: September 2019 to identify the status of all previously outstanding recommendations, i.e. those that were not classified as 'A - implemented' or 'D - no longer relevant' in previous updates. The table below summarises management's most recent self-assessment. Audit owners were requested to categorise the recommendations as follows:

A - Fully implemented

B - Partially implemented

C - Not implemented

D - No longer relevant/ Not accepted by management

Phase 1 showed that of all due findings, 8 were deemed fully implemented,

32 partially implemented, 4 were not implemented and 3 no longer relevant

Phase 2 showed that of all due findings, 24 were fully implemented, 37 partially implemented, 11 not implemented.

#### Findings assessed at Phase 2

Management Self-Assessment	Advisory	Low	Medium	High	Total
A - Fully implemented	<u>-</u>	16	7	1	24
B - Partially implemented	-	22	12	3	37
C - Not yet implemented	-	7	3	1	11
D - No longer relevant/not accepted	-	-	-	-	-
Total		45	22	5	72

The 5 high risk findings were in relation to, Purchasing (Subsidiary review), Major Breaches to the Agreement: Anti-bribery and Insurance (International Faculty in Greece review), Information provision programmes (CMA review), accuracy of accreditation data (Unistats review) and CRISP- Single point of failure (IdAM review)

#### Results of PwC validation

To provide comfort that the recommendations reported have been classified correctly, we tested all high and medium rated risks and a sample of low risk recommendations. Our assessment is summarised below:

Phase 1: We tested all 8 fully implemented recommendations, a sample of 14 partially implemented ones and the 3 that were classified as no longer relevant.

Phase 2: We tested all 24 fully implemented recommendations and 19 partially implemented ones.



Appendix A: Mapping of internal audit work

Appendix B: Basis of our classifications

Appendix C: Opinion types

Appendix D: Limitations and esponsibilities

# **Appendices**

**Appendix A: Mapping of internal** audit work

Appendix B: Basis of our classifications

Appendix C: Opinion types

Appendix D: Limitations and responsibilities

# Appendix A: Mapping of internal audit work

#### Reporting responsibilities

The table below maps our internal audit work against the Audit Committee's reporting responsibilities.

Auditable Unit	Governance	Control	Value for money	Risk management	Data quality
Governance around 5 IT risks	✓	✓	✓	✓	
General Data Protection Regulation (GDPR) Compliance	✓	✓		✓	✓
UKVI Compliance – Tier 5	✓	✓			✓
Payment Card Industry–Data Security Standard (PCI-DSS) review	✓	✓		✓	
Research Ethics	✓	✓	✓		
International Faculty in Greece	✓	✓	✓	<b>√</b>	
Teaching Excellence Framework	✓	✓		<b>√</b>	✓
Undergraduate Marketing Recruitment		✓	✓	✓	
Finance – continuous auditing (Phase 1)		✓	✓		✓
Finance – continuous auditing (Phase 2)		✓	<b>√</b>		✓
Review of the Accommodation System Starez		✓	✓		✓
UUK compliance student accommodation		✓		✓	
IT Contingency Planning	✓	✓	✓	✓	
Health and Safety	✓	✓		<b>√</b>	
Student Wellbeing and Support			<b>√</b>		
Departmental Health Checks		✓	✓		
Medicine, Dentistry and Health Faculty Review		✓	<b>√</b>		
Subsidiary Review – SUEL	✓	✓	✓		
Follow Up review (Phase 1)	✓	✓	✓	✓	✓
Follow Up review (Phase 2)	✓	✓	✓	✓	✓

#### Key

Testing focused on this area

#### **Data submission**

It is of particular note that the Audit Committee's Annual Report must include an opinion on the adequacy and effectiveness of arrangements for the management and quality assurance of data submissions to the Higher Education Statistics Agency, OfS, Student Loans Company, and other funding bodies.

To assist the Audit Committee prepare its Annual Report, we have outlined above where our work assessed the arrangements for the management and quality assurance of data submissions (see the table on this page).

We provide no conclusions or opinion on data quality beyond the risk ratings and recommendations in our individual assignment reports on data quality.

Appendix D: Limitations and responsibilities

### Appendix B: Basis of our classifications

#### **Individual finding ratings**

**Appendix A: Testing Results** 

Findings are assessed on their impact and likelihood based on the assessment rationale in the tables below.

Impact rating	Assessment rationale
6	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 or brand of the organisation which could threaten its future viability.
5	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 large fines and consequences or
	Significant impact on the reputation or brand of the organisation
4	A finding that could have a:
-	Major impact on operational performance or
	Major monetary or financial statement impact or
	<ul> <li>Major breach in laws and regulations resulting in significant fines and consequences or</li> </ul>
	Major impact on the reputation or brand of the organisation.
3	A finding that could have a:
	Moderate impact on the organisation's operational performance or
	Moderate monetary or financial statement impact or
	Moderate breach in laws and regulations with moderate consequences or
	Moderate impact on the reputation of the organisation



Appendix D: Limitations and responsibilities

# Appendix B: Basis of our classifications

#### **Individual finding ratings**

**Appendix A: Testing Results** 

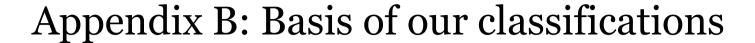
Impact rating	Assessment rationale
2	A finding that could have a:
	Minor impact on the organisation's operational performance or
	Minor monetary or financial statement impact or
	Minor breach in laws and regulations with limited consequences or
	Minor impact on the reputation of the organisation.
1	A finding that could have a:
	Insignificant impact on the organisation's operational performance or
	Insignificant monetary or financial statement impact or
	Insignificant breach in laws and regulations with little consequence or
	Insignificant 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.

#### Likelihood

Likelihood rating	Assessment rationale
vi	Has occurred or probable in the near future
v	Possible in the next 12 months
iv	Possible in the next 1-2 years
iii	Possible in the medium term (2-5 years)
ii	Possible in the long term (5-10 years)
i	Unlikely in the foreseeable future







#### **Finding rating**

This grid is used to determine the overall finding rating. Issues with a low impact and likelihood rating will not be reported.

#### Impact rating Likelihood rating 5 3 2 1 6 4 Critical Medium Medium νi Critical Medium Medium Low Critical High iν High High Medium Medium Low Low iii Medium Medium Low Low Low ii Medium Medium Low Not reportable Low Low Medium Low Low Not reportable Not reportable Low

#### **Report classifications**

The report classification is determined by allocating points to each of the findings included in the report.

Findings rating	Points	Report classification	Option A	Option B	Points	
Critical	40 points per finding		Low risk	Satisfactory	6 points or less	
High	10 points per finding	•	Medium risk	Satisfactory with exceptions	7 – 15 points 20	)
Medium	3 points per finding		High risk	Needs improvement	16 – 39 points	
Low	1 point per finding		Critical risk	Unsatisfactory	40 points and over	



Appendix A: Mapping of internal audit work

Appendix B: Basis of our classifications

**Appendix C: Opinion types** 

Appendix D: Limitations and responsibilities

# Appendix C: Opinion types

The table below sets out the four types of opinion that we use, along with an indication of the types of findings that may determine the opinion given. The Head of Internal Audit will apply his/her judgement when determining the appropriate opinion so the guide given below is indicative rather than definitive.

Type of opinion	Indication of when this type of opinion may be given
Satisfactory	<ul> <li>A limited number of medium risk rated weaknesses may have been identified, but generally only low risk rated weaknesses have been found in individual assignments; and</li> </ul>
	<ul> <li>None of the individual assignment reports have an overall report classification of either high or critical risk.</li> </ul>
Generally satisfactory with some	<ul> <li>Medium risk rated weaknesses identified in individual assignments that are not significant in aggregate to the system of internal control; and/or</li> </ul>
improvements required	• High risk rated weaknesses identified in individual assignments that are isolated to specific systems or processes; and
	None of the individual assignment reports have an overall classification of critical risk.
Major improvement required	<ul> <li>Medium risk rated weaknesses identified in individual assignments that are significant in aggregate but discrete parts of the system of internal control remain unaffected; and/or</li> </ul>
	<ul> <li>High risk rated weaknesses identified in individual assignments that are significant in aggregate but discrete parts of the system of internal control remain unaffected; and/or</li> </ul>
	• Critical risk rated weaknesses identified in individual assignments that are <b>not pervasive</b> to the system of internal control; and
	• A minority of the individual assignment reports may have an overall report classification of either high or critical risk.
Unsatisfactory	• High risk rated weaknesses identified in individual assignments that <b>in aggregate are pervasive</b> to the system of internal control; and/or
-	<ul> <li>Critical risk rated weaknesses identified in individual assignments that are pervasive to the system of internal control; and/or</li> </ul>
	• More than a minority of the individual assignment reports have an overall report classification of either high or critical risk.
Disclaimer opinion	An opinion cannot be issued because insufficient internal audit work has been completed. This may be due to either:
	- Restrictions in the audit programme agreed with the Audit Committee, which meant that our planned work would not allow us to gather sufficient evidence to conclude on the adequacy and effectiveness of governance, risk management and control; or
	<ul> <li>We were unable to complete enough reviews and gather sufficient information to conclude on the adequacy and effectiveness of arrangements for governance, risk management and control.</li> </ul>



Appendix A: Mapping of internal audit work

Appendix B: Basis of our classifications

Appendix C: Opinion types

**Appendix D: Limitations and responsibilities** 

# Appendix D: Limitations and responsibilities

#### Limitations inherent to the internal auditor's work

Our work has been performed subject to the limitations outlined below. :

#### Opinion

The opinion is based solely on the work undertaken as part of the agreed internal audit plan. There might be weaknesses in the system of internal control that we are not aware of because they did not form part of our programme of work, were excluded from the scope of individual internal audit assignments or were not brought to our attention. As a consequence management and the Audit Committee should be aware that our opinion may have differed if our programme of work or scope for individual reviews was extended or other relevant matters were brought to our attention.

#### Internal control

Internal control systems, 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 occurrence of unforeseeable circumstances.

#### **Future periods**

Our assessment of controls relating to University of Sheffield is for the period 1 August 2018 to 31 July 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 auditors

It is management's responsibility to develop and maintain sound systems of risk management, internal control and governance and for the prevention and detection of irregularities and fraud. Internal audit work should not be seen as a substitute for management's responsibilities for the design and operation of these systems.

We endeavour to plan our work so that we have a reasonable expectation of detecting significant control weaknesses and, if detected, we carry out additional work directed towards identification of consequent fraud or other irregularities. However, internal audit procedures alone, even when carried out with due professional care, do not guarantee that fraud will be detected.

Accordingly, our examinations as internal auditors should not be relied upon solely to disclose fraud, defalcations or other irregularities which may exist.



pwc.co.uk

This document has been prepared only for University of Sheffield and solely for the purpose and on the terms agreed with University of Sheffield in our agreement dated 01 August 2018. We accept no liability (including for negligence) to anyone else in connection with this document, and it may not be provided to anyone else.

Internal audit work was performed in accordance with PwC's Internal Audit methodology which is aligned to [name of public sector internal audit standards]. As a result, our work and deliverables are not designed or intended to comply with the International Auditing and Assurance Standards Board (IAASB), International Framework for Assurance Engagements (IFAE) and International Standard on Assurance Engagements (ISAE) 3000.

In the event that, pursuant to a request which University of Sheffield has received under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004 (as the same may be amended or re-enacted from time to time) or any subordinate legislation made thereunder (collectively, the "Legislation"), University of Sheffield is required to disclose any information contained in this document, it will notify PwC promptly and will consult with PwC prior to disclosing such document. University of Sheffield agrees to pay due regard to any representations which PwC may make in connection with such disclosure and to apply any relevant exemptions which may exist under the Legislation to such report. If, following consultation with PwC, University of Sheffield discloses any this document or any part thereof, it shall ensure that any disclaimer which PwC has included or may subsequently wish to include in the information is reproduced in full in any copies disclosed.

© 2019 PricewaterhouseCoopers LLP. All rights reserved. In this document, "PwC" refers to the UK member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.