The Internal Audit Process:

TEST AND CONTROL

AUI3702

Semesters 1 & 2

Department
of Auditing

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Foreword

STUDY OVERVIEW

Every human being has certain objectives in life. Being the manager of your life, you would have set certain **objectives** for yourself. Being registered for this module indicates that one of your objectives is to obtain a degree at Unisa. Since this is a third level module, you should be aware of the **risks** that may keep you from reaching this objective, such as

- not having adequate time to study
- not being able to pay for your studies
- falling ill and not being able to study and/or write the exam

Having reached this level of study also indicates that you have implemented adequate **controls** to keep these risks from manifesting.

Let's think of possible controls you may have implemented:

Risks	**Controls**
 not having adequate time to study	• Diarise deadlines for assignments and plan time to complete them • Arrange adequate study leave in advance to prepare for exams • Limit social activities to weekends only
 not being able to pay for your studies	• Make sure you pass, so that your sponsors will be willing to continue paying for your studies • Be a diligent and reliable worker so that you will continue to earn money to pay for your own studies • Restrict yourself to a budget so that you will have money to pay for your studies
 falling ill and not being able to study and/or write exam	• Eat healthy • Get enough sleep • Exercise frequently

The ultimate proof to yourself that you have implemented adequate controls will be to receive positive results at the end of the semester. However, if you are wise enough, you will perform interim **tests of the controls** on the controls you have implemented to provide assurance to yourself that the controls are working. By testing the controls you will be able to assess whether or not the controls you have implemented are working as intended or whether additional controls or adjustments to the existing controls may be necessary. How would you test the adequacy of these controls?

Risks	Controls	Tests of controls
	• Diarise deadlines for assignments and plan time to complete them • Arrange adequate study leave in advance to prepare for exams • Limit social activities to weekends only	• Confirm with your work and friends that you have diarised all commitments and that you still have time to complete the assignments as planned • Obtain written approval of your leave arrangements from management • Page through your diary and reflect on your time management for the two recent and two coming weeks to ensure that you are not engaging in social activities during the week
	• Make sure you pass, so that your sponsors will be willing to continue paying for your studies • Be a diligent and reliable worker so that you will continue to earn money to pay for your own studies • Restrict yourself to a budget so that you will have money to pay for your studies	• Check on myUnisa that the university has received your assignments before the cut-off date and that you have admission to the exams • Discuss your performance with your supervisor/manager and find out if he or she is satisfied or how you can improve • Check your expenses against your budget and make sure you keep within the limits set for yourself
	• Eat healthy • Get enough sleep • Exercise frequently	From time to time, reflect on • when last you had a decent meal • what time you have been going to bed • when last you got exercise

You can either rely on your own tests of controls or obtain objective assurance on the above controls. For instance, you can go to the bank to obtain a statement of your account balance. This should provide assurance that you will have enough money to pay for your studies. You can also go to the doctor for a check-up to ensure that your health is in order and that you should be able to write the exams. Should you find that one of the controls is not working – say for instance you have not been exercising – you will have to make some adjustments. You may for instance have to ask a reliable friend to call you up in the mornings and to go running with you.

This module is all about testing controls and especially testing the controls that an organisation's management have developed to control the financial risks within their organisation. As you have seen in the example above, controls do not apply to financial systems only; controls are developed to mitigate and manage the risks that threaten the achievement of objectives. Financial risks are one of many categories of risks organisations face. Other risks may be categorised as operational risks, compliance risks, environmental risks and so on. Testing (or auditing) the controls aimed to mitigate those risks is covered in module AUI3703.

To be able to understand this module, you need to have passed the second level module AUE2602: *Corporate Governance in Accountancy*. The discussions in this module (AUI3702) will rely strongly on your knowledge and understanding of module AUE2602 and we will frequently refer back to the principles discussed there. I, therefore, strongly recommend that you take time to revise your knowledge of AUE2602 before you continue with your study of AUI3702.

I would like to draw your attention to a subtle shift in focus between the two modules. AUE2602 is presented from an external auditing perspective and reference is made to the external auditing

standards, while AUI3702 is presented from an internal auditing perspective and reference is primarily made to internal auditing guidance (i. e. the International Professional Practices Framework). Testing controls is a common field for all auditors and the methods and concepts taught in AUI3702 will therefore apply to both internal and external auditors.

The module starts out with a discussion of internal auditing and other guidance as well as best practices with regard to performing tests of controls. It then goes on to discuss how tests of controls should be conducted and finally how to report the results of such testing.

THE ICONS FOR ACTIVITIES USED IN YOUR STUDY MATERIAL

Each study unit contains various activities which you should perform. The study activities, for example, refer you to the study material in the study guide and tutorial letters which you are required to study; the doing and thinking activities require you to perform certain actions and to answer certain questions.

The icons that will be used in this learning guide and tutorial letter are listed below, together with a description of what each of them means.

Icon	Description
	**Key concepts.** The key concepts icon draws your **attention** to certain keywords or concepts that you will come across in the topic or study unit.
	**Learning outcomes**. The learning outcomes indicate what parts of the topic or study units you have to master and demonstrate that you have mastered.
	**Mind map**. Mind maps are provided to help you to see the relationship between various parts of the learning material.
	**Study.** The study icon indicates which sections of the prescribed book or the learning guide you need to study and internalise.
	**Read.** The read icon will direct you to read certain sections of the prescribed book for background information.
	**Activity**. The activity icon refers to activities that you must do in order to develop a deeper understanding of the learning material.
	**Reflection**. The reflection icon requires you to reflect on the important issues or problems dealt with in the study unit.
	**Assessment.** When you see the assessment icon you will be required to test your knowledge, understanding and application of the material you have just studied.
	**Feedback.** The feedback icon indicates that you will receive feedback on your answers to the self-assessment activities.
	**Multimedia**. The multimedia icon indicates that you have to refer to any audio, vid- eo, DVD material that may be included in your study material.
	**Time-out.** The time-out icon indicates that you should take a rest because you have reached the end of a study unit or topic.

STUDY SOURCES

The study material for this module comprises the discussions and explanations contained in this study guide and tutorial letters, the study material issued and prescribed for Module AUE2602: *Corporate Governance in Accounting*, as well as those contained in the following prescribed books:

- *Auditing legislation and standards*. Durban: LexisNexis Butterworths. (Latest edition.)
- Gowar, H & Jackson, RDC. Graded questions on auditing. Durban: LexisNexis Butterworths. (Latest edition.)
- Jackson, RDC & Stent, WJ. *Auditing notes for South African students*. Durban: LexisNexis Butterworths. (Latest edition.)

PART A

Conducting tests of controls according to the International Professional Practices Framework (IPPF)

Contents

TOPIC 1

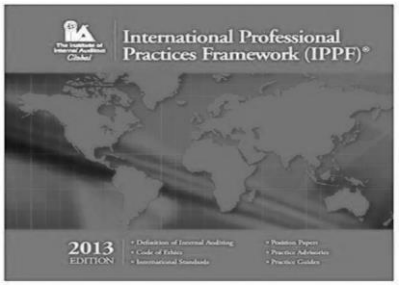
IPPF requirements and guidance for performing tests of controls

Contents

INTRODUCTION AND PURPOSE OF THE TOPIC

Internal auditing is performed, throughout the world, in diverse environments and within organisations that vary in purpose, size and structure. While differences may affect the practice of internal auditing in each environment, conformance with the Standards is essential in meeting the responsibilities of internal auditors and the internal audit activity.

(International Professional Practice Framework [IPPF] 2009:xv):



The aim of the International Professional Practices Framework (IPPF), developed and published by the Institute of Internal Auditors (IIA) is to ensure professionalism and consistency in the practice of internal auditing. Internal auditors demonstrate their professionalism by adhering to the IPPF.

The purpose of this topic is to guide you to know and understand the requirements and guidance contained in the IPPF that have an impact on performing tests of controls so that you can become proficient in conforming to the IPPF and other relevant guidance when conducting tests of controls in internal audit engagements.

As you proceed through the study guide, you will frequently be requested to reflect on the knowledge you have obtained of relevant IPPF requirements and guidance while studying topic 1.

LEARNING OUTCOMES

When you have worked through this topic you should be able to

- demonstrate a solid knowledge and understanding of the International Professional Practices Framework's (IPPF) provisions and other guidance which may impact on the way internal auditors perform tests of controls
- apply the International Professional Practices Framework's (IPPF) and other authoritative guidance when conducting tests of controls

The role and purpose of the IPPF is discussed in detail in the second level module for Internal Auditing: *Internal Auditing II* (AUI2601). At this level of your internal auditing studies you will, therefore, have come across the following graphical depiction of the IPPF as published by the Institute of Internal Auditors on their website http://www.theiia.org:

This IPPF diagram illustrates that internal auditors must adhere to the stipulations of the core principles, the definition of internal auditing, the International Standards and the Code of Ethics, and that it is strongly recommended that they follow the guidance provided in the Implementation Guidance (Practice Advisories) and Supplemental Guidance (Practice Guides).

In this topic you will learn how to apply the requirements and guidance of the IPPF when conducting tests of controls. We will, therefore, place emphasis on the guidance that specifically relates to the testing of controls.

Study unit 1

IIA code of ethics

The IIA Code of Ethics firstly identifies **four principles** that are relevant to the profession and practice of internal auditing. These principles of **integrity**, **objectivity**, **confidentiality** and **competency *must*** serve as the cornerstones of all internal audit activity.

Secondly, for each of the principles identified above, the IIA Code of Ethics stipulates certain **rules of conduct** which describe behavioural norms expected of internal auditors. These rules are an aid to interpreting the principles into practical applications and are intended to guide the ethical conduct of internal auditors.

STUDY

Study the IIA Code of Ethics as provided on myUnisa, AUI3702, Announcements.

Study the internal auditing definition, general principles and the IIA Code of Ethics as discussed in the AUI2601 Study guide, topic 1, 2 and 3.

Study Auditing Notes(Jackson and Stent), chapter 1: Theory and philosophy of auditing.

KEY CONCEPTS

The key concepts to focus on when you study the IIA Code of Ethics are

- the **principles**
- the **rules of conduct**

The key concept to focus on when you work through this study unit is how to conform to the Code of Ethics when performing tests of controls.

The following diagram describes examples of unacceptable (X) and acceptable (√) conduct when conducting tests of controls and aims to explain how the Code of Ethics can be used to guide acceptable internal auditing practice when conducting tests of controls.

Principle	**Rules of conduct (condensed)**	**X**	**√**
Integrity	Perform work with honesty, diligence and responsibility	The internal auditors use an unrevised audit programme, used three years ago, to conduct an organisation-wide audit of credit sales.	The internal auditors perform a detailed risk assessment and identify the key controls with regard to credit sales before they decide on the tests to be performed.
	Observe the law and make disclosures expected by law or the profession	An internal auditor accepts an excuse from a manufacturing site manager for ignoring regulations regarding the treatment of hazardous waste and mentions nothing in his final report.	After noticing that consideration is not given to regulations with regard to the treatment of hazardous waste on a manufacturing site, the internal auditor immediately issues a written notification to a person with sufficient responsibility within the organisation to take suitable action and follows up on the actions taken. The finding and any actions taken are included in the final audit report.
	Not be part of illegal activity or acts discreditable to the profession or the organisation	In loyalty to her organisation who is experiencing financial difficulty, a chief audit executive (CAE) ignores the scheduled audit of the final tax return for the current tax year, knowing that management is understating taxable income.	Realising that management intends to understate taxable income, the internal auditor expresses her dissatisfaction and issues an interim report to the directors and audit committee stating that this would be against the law and to the detriment of the organisation as severe penalties could follow.
	Respect and contribute to legitimate and ethical objectives of the organisation	An internal auditor joins a protest action against an organisation after instituting a time management clock-in system for administrative staff.	The internal audit activity publishes an informative article on the organisation's intranet, setting out the advantages of introducing a time-management clock-in system for administrative staff.

Principle	Rules of conduct (condensed)	X	√
Objectivity	Not participate in any activity or relationship which may impair unbiased assessment or which is in conflict with the interests of the organisation	An internal auditor is assigned to an audit of controls in the procurement section, which is headed by his father.	The internal auditor reports his relationship with his father who is heading the procurement section and further assignments of staff are made with due consideration of this information.
	Not accept anything which may impair professional judgement	An internal auditor fights to be assigned to the annual audit of his organisation's retail outlet in the North West province as he loves hunting and always gets an opportunity to hunt on the branch manager's farm during one of the weekends falling within the audit.	An internal auditor rejects an offer to go hunting with the branch manager on his farm, knowing that this could be seen as an impairment of his objectivity when auditing controls at the branch.
	Disclose all known material facts that, if not disclosed, may distort the reporting of activities under review	Since everyone in the organisation is aware of the IT department's inability to arrange suitable back-up facilities for the financial systems of the organisation, the internal auditor makes no mention of the fact in his report following an audit of general IT controls.	The auditor includes a finding on the lack of suitable back-up facilities in his audit report, explaining the possible effect of the shortcoming and recommending the necessary actions to be taken. He also includes any comments from IT management in response to the finding.

Principle	Rules of conduct (condensed)	X	√
Confidentiality	Be prudent in the use and protection of information acquired	While auditing controls over wage pay-outs, an auditor finds that some controls have been circumvented. She discusses her finding and the possibility of fraud with her colleague in the canteen over lunch.	While auditing controls over wage pay-outs, an auditor finds that some controls have been circumvented. She discusses her finding and the possibility of fraud with the internal audit manager in his office.
	Not use any information for personal gain and/or that is contrary to the law or detrimental to the organisation	During an audit of procurement controls an auditor realises that he buys printing cartridges for his own private use for 15% less than the lowest of three quotes obtained by the organisation. He convinces the procurement clerk to obtain a quote from the supplier he buys from and arranges with the supplier to pay him a 5% commission on all the cartridges sold to the organisation.	During an audit of procurement controls an auditor realises that he buys printing cartridges for his own private use for 15% less than the lowest of three quotes obtained by the organisation. He mentions the fact to the procurement manager to investigate further.

Principle	Rules of conduct (condensed)	X	√
Competency	Engage only in those services for which they have the necessary knowledge, skills and experience	An internal audit activity appoints a chartered accountant who has recently completed her articles with an auditing firm and assigns her to lead an audit of control over the purchasing and implementation of new IT systems.	An internal audit activity appoints an experienced IT auditor who has recently become qualified as a Certified Information Systems Auditor, and assigns her to lead an audit of control over the purchasing and implementation of new IT systems.
	Perform internal audit services in accordance with the Standards	An audit file contains an audit programme, specifically designed for the audit, where a third of the procedures have been left undone without any further explanation.	An audit file contains an audit programme, specifically designed for the audit, where a third of the procedures have been left undone. Detailed explanations are provided in all instances which have been signed off by the audit supervisor providing the reasons why the procedures could not be performed and indicating alternative procedures which have been carried out.
	Continually improve proficiency and the effectiveness and quality of services	An internal auditor assigned to an audit in a remote location refuses to attend training in the use of automated working papers which will enable continuous supervision over the audit.	To enable continuous supervision of audit assignments, training in the use of automated working papers has been made compulsory for all internal auditors before they can be assigned to any audit engagement.

To clearly illustrate unacceptable and acceptable behaviour, we have simplified the examples in the diagram above. In practice it sometimes becomes difficult to distinguish between acceptable and unacceptable behaviour. When in doubt, junior auditors should seek advice from internal audit management and/or the chief internal auditor. Internal audit executives may have to seek technical advice from the Institute of Internal Auditors or from legal advisors. Of essence, however, is an in-depth knowledge and conceptualisation of the principles and rules of conduct and their continuous integration into any aspect of internal auditing practice.

Study unit 2

International standards for the professional practice of internal auditing (standards)

INTRODUCTION

The Standards are mandatory requirements consisting of

- statements of basic requirements for the professional practice of internal auditing and for evaluating the effectiveness of its performance which are internationally applicable at organisational and individual levels
- interpretations, which clarify terms or concepts within the statements

It is necessary to consider both the statements and their interpretations to understand and apply the Standards correctly.

The purpose of the Standards is to

- delineate basic principles that represent the practice of internal auditing
- provide a framework for performing and promoting a broad range of value-added internal auditing services
- establish the basis for the evaluation of internal audit performance
- foster improved organisational process and operations

The Standards provide the basis for the measurement of internal auditing performance and the potential of internal audit to improve management processes and operations.

This study unit focuses on those Standards that provide guidance on performing tests of controls.

STUDY

- Study the IIA Standards (IPPF) as discussed in the AUI2601 Study guide, Topic 3.

ATTRIBUTE STANDARDS

1000 – Purpose, Authority and Responsibility

1100 – Independence and Objectivity

1200 – Proficiency and Due Professional Care

1300 – Quality Assurance and Improvement Program

PERFORMANCE STANDARDS

2000 – Managing the Internal Audit Activity

2100 – Nature of Work

2200 – Engagement Planning

2300 – Performing the Engagement

2400 – Communicating Results

2500 – Monitoring Progress

2600 – Resolution of Senior Management's Acceptance of Risks

KEY CONCEPTS

The key concepts to focus on when studying the Attribute Standards are

- the internal audit **charter**
- **assurance** and **consulting services**
- organisational **independence**
- individual **objectivity**
- proficiency
- due professional care
- ongoing monitoring
- using the statement **"Conforms with the International standards for the Professional Practice of Internal Auditing"**

The key concepts to focus on when studying the Performance Standards are

- adding value
- **effectively** managing the internal audit activity
- **risk-based** planning
- **resource** management
- **coordination** of activities with other assurance providers
- using a **systematic and disciplined approach**
- assessing and improving **governance processes**
- evaluating and improving **risk management processes**
- assist in maintaining **effective controls**
- engagement **planning**
- establishing engagement **objectives**
- engagement **scope**
- **resources** allocation
- work programmes
- identifying **sufficient, reliable, relevant** and **useful** information
- analysing and evaluating **engagement results**
- documenting **information**
- supervision
- **communicating** results
- **disseminating** results
- **monitoring progress**
- resolution of **senior management's acceptance of risks**

The key concept to focus on when you work through this study unit is how to conform to the Standards when you perform tests of controls.

The following diagram explains how the Standards may be interpreted/applied when performing tests of controls.

Attribute standards:

Concept	Standard	Interpretation/Implementation
The internal audit **charter**	**1000**	● The internal audit charter should clearly state the internal auditor's responsibility and authority to conduct tests of controls within the organisation. ● The charter should authorise access to records, personnel and physical properties relevant to performing tests of controls. ● If tests of controls result in assurances to be provided to parties outside the organisation, the charter must define the nature of these assurances.
Assurance & **consulting** services	**1000**	● The nature of assurance and consulting services involving tests of controls should be defined in the charter. (For a better understanding of the difference between assurance and consulting services, read the section "Assurance and Consulting Services" in Reding et al, chapter 2.)
Organisational **independence**	**1110**	● When testing controls, the internal audit activity must be free from interference when determining the scope of such testing, the procedures applied to do the testing and communicating the results of such testing. ● To accomplish this, the chief internal auditor should report to a level within the organisation that allows the internal audit function to accomplish its responsibilities and have direct interaction with the board and audit committee.
Individual **objectivity**	**1120**	● An internal auditor should have no conflicting interests that may influence or may appear to be influencing his or her ability to perform tests of controls objectively.
Impairment to independence and/or objectivity	**1130**	● If independence or objectivity is impaired in fact or appearance, the details of the impairment (i.e. conflict of interest, scope limitation, restriction on access to records, personnel and properties and resource limitations) must be disclosed to appropriate parties. ● Internal auditors must refrain from performing tests of controls as part of assurance engagements in areas they were previously responsible for – at least for one year.
Proficiency	**1210**	● Internal audit activities and individual internal auditors involved in the testing of controls should possess the knowledge, skills and other competencies needed to conduct tests of controls. ● Practice Advisory 1210-1 elaborates on the proficiency requirements for internal auditors. ● Where an internal audit activity lacks competencies to conduct a specific assurance engagement, the competencies should be obtained elsewhere.

Concept	Standard	Interpretation/Implementation
		● Internal auditors must have sufficient knowledge to evaluate the risk of fraud when performing tests of controls. ● Internal auditors should have sufficient knowledge of key information technology risks and controls and available technology-based audit techniques to perform their assigned work.
Due professional care	**1220**	● When performing tests of controls, the internal auditor should exercise due professional care by considering the – extent of work needed to achieve the engagement's objectives – relative complexity, materiality or significance of matters to which testing procedures are applied – adequacy and effectiveness of governance, risk management and control processes – probability of significant errors, fraud or non-compliance – cost of controls/assurance provided in relation to the potential benefit ● When performing tests of controls the internal auditor must consider the use of technology-based audit and other data analysis techniques. ● Internal auditors must be alert to potential risks that might affect objectives, operations or resources when testing controls. ● When performing tests of controls as part of a consulting engagement, internal auditors should consider – the needs and expectations of clients, including the nature, timing, and communication of engagement results – relative complexity and extent of work needed to achieve the engagement's objectives – cost of the consulting engagement in relation to potential benefits
	1311	● Tests of controls should be subjected to ongoing monitoring which should form an integral part of the day-to-day supervision, review, and measurement of the internal audit activity.
Using the statement: "**Conforms with the International standards for the Professional Practice of Internal Auditing**"	**1340**	● When reporting the results of an audit of controls, the auditor may only state that the audit was performed in conformance with the Standards if the results of the quality assurance and improvement programme support this statement.

Performance standards:

Concept	Standard	Interpretation/Implementation
Risk based planning	**2010**	Test of control audits should form part of the internal audit activity's risk-based plans. In developing a risk-based plan for the internal audit activity, the CAE takes into account the organisation's risk management framework, including using risk appetite levels set by management for the different activities or parts of the organisation.
Coordination of activities with other assurance providers	**2050**	The internal auditors should share information and co-ordinate activities with regard to control testing with other internal and external assurance providers and consulting services to ensure proper coverage and minimise duplication of efforts.
Using a systematic and disciplined approach	**2100**	The internal audit activity must use a systematic and disciplined approach when performing tests of con- trols. This approach will be discussed in more detail in topic 3 of this module.
Assessing and improving governance processes	**2110**	Where deemed necessary the internal audit function will perform tests of controls to assess and make recommendations that will improve the organisation's governance processes. In doing this the internal audit activity aims to – promote appropriate ethics and values within the organisation – ensure effective organisational performance management and accountability – communicate risk and control information to appropriate areas of the organisation and – coordinate the activities of and communicate information among the board, external and internal auditors and management
Evaluating and improving risk management processes	**2120**	Where deemed necessary the internal audit function will perform tests of controls to assess and make recommendations that will improve the organisation's risk management process. In performing these tests the internal audit activity will assess whether or not the – organisational objectives support and align with the organisation's mission – significant risks are identified and assessed – appropriate risk responses are selected that align risks with the organisation's risk appetite – relevant risk information is captured and communicated in a timely manner across the organisation, enabling staff, management and the board to carry out their responsibilities
Assisting in maintaining effective controls	**2130**	Where deemed necessary the internal audit function will perform tests of controls to help the organisation maintain effective controls by evaluating their effectiveness and efficiency and by promoting continuous

		improvement. To this effect, the internal audit activity evaluates risk exposures and evaluates the design adequacy and operating effectiveness of controls regarding the – reliability and integrity of financial and operational information – effectiveness and efficiency of operations – safeguarding of assets – compliance with laws, regulations and contracts
Engagement planning	**2200**	A plan should be documented for test of control engagements. The plan should include the engagement's objectives, scope, timing and resource allocations. In planning such an engagement the auditor should consider – the objectives of the activity being reviewed and the means by which the activity controls its performance – the significant risks to the activity, its objectives, resources and operations and the means by which the potential impact of risk is kept to an acceptable level – the adequacy and effectiveness of the activity's risk management and control processes compared to a relevant control framework or model – the opportunities for making significant improvements to the activity's risk management and control processes
Establishing engagement objectives	**2210**	
Engagement scope	**2220**	
Resource allocation	**2230**	
Work programmes	**2240**	
Identifying sufficient, reliable, relevant and useful information	**2310**	The internal auditor should collect sufficient, reliable, relevant and useful information to support the findings resulting from the tests of controls.
Analysing and evaluating engagement results	**2320**	Conclusions and opinions should be based on appropriate analysis and evaluations.
Documenting information	**2330**	Relevant information should be documented to sup- port conclusions reached.
Supervision	**2340**	Proper supervision must ensure that objectives are achieved, quality is assured and staff are developed.
Communicating results	**2400**	For test of control engagements to be of value, results should be communicated timely to appropriate users. Communications must include the engagement's objectives and scope as well as applicable conclusions, recommendations and action plans. Communications must be accurate, objective, clear, concise, constructive, complete and timely. Corrected information should be communicated to all parties who received the original communication. The statement per Standard 2430 may only be used if the results of the quality assurance and improvement programme support the statement.
Criteria for communicating	**2410**	
Quality of communication	**2420**	
Errors and omissions	**2421**	
"Conducted in accordance with the Standards"	**2430**	

Disseminating results	**2440**	The CAE must report internal audit engagement results to appropriate parties.
Monitoring progress	**2500**	For assurance engagements this implies that the CAE must ascertain that management actions have been effectively implemented or that senior management has accepted the risk of not taking action. For consulting engagements, the internal audit activity must monitor the disposition of results to the extent agreed upon with the customer.
Resolution of senior management's acceptance of risks	**2600**	When an unacceptable level of residual risk is believed to exist, the CAE must discuss the matter with senior management and if the matter is not resolved, the CAE must report the matter to the board.

Study unit 3

Other internal auditing guidance impacting on performing tests of controls

Strongly recommended IIA guidance consists of the Implementation Standards, Position Papers and Practice Guides issued by the IIA Research Foundation.

READ

Access myUnisa, AUI3702, Announcements for a link to the Implementation Standards.

3.1 RECOMMENED GUIDANCE

The Implementation Standards cover approach, methodology and considerations, but **not** detailed processes and procedures. They provide concise and timely guidance to assist internal auditors when applying the Code of Ethics and Standards and promoting good practices. These advisories include practices relating to international, national or industry-specific issues, specific types of engagements and legal or regulatory issues.

Attribute Standards

Standard	Implementation Standards	
1000	1000-1	Internal audit charter
1100	1130-1: 1130.A1-1:	Impairment to independence or objectivity Assessing operations for which internal auditors were previously responsible

Standard	Implementation Standards	
1200	1210-1:	Proficiency
	1210.A1-1:	Obtaining external service providers to support or complement the internal audit activity
	1220-1:	Due professional care
1300	1321-1:	Use of "conforms to the International Standards for the Professional Practice of Internal Auditing".

Performance Standards

Standard	Implementation Standards	
2000	2010-1	Linking the audit plan to risks and exposures
	2010-2:	Using the risk management process in internal audit planning
	2030-1	Resource management Coordination
	2050-1:	Assurance maps
	2050-2:	Relying on the work of other assurance providers
	2050-3:	
	2060-1:	Reporting to senior management and the board
2100	2110-2:	Governance: Relationship with risk and control
	2120-1:	Assessing the adequacy of risk management processes
	2130-1:	Assessing the adequacy of control processes
	2130.A1-1:	Information reliability and integrity
	2130.A1-2:	Evaluating an organisation's privacy framework
2200	2200-2:	Using a top-down risk-based approach to identify the controls to be assessed in an internal audit engagement
	2210-1:	Engagement objectives
	2210.A1-1:	Risk assessment in engagement planning
	2240-1:	Engagement work programme
2300	2300-1:	Use of personal information in conducting engagements
	2320-2	Root cause analysis Audit
	2320-3	Sampling
	2330-1:	Documenting information Control of
	2330.A1-1:	engagement records
	2330.A1-2:	Granting access to engagement records
	2330.A2-1:	Retention of records
	2340-1:	Engagement supervision
2400	2400-1:	Legal considerations in communicating results

Standard	Implementation Standards	
	2410-1:	Communication criteria
	2440.A2-1:	Quality of communications outside the organisation
	2440-1:	Disseminating results
	2440-2:	Communicating sensitive information within and outside the chain of command

3.2 POSITION PAPERS

The IIA often issues statements in the form of Position Papers to help a wide range of interested parties to understand significant governance, risk or control issues and delineate related roles and responsibilities of internal auditing.

The following Position Papers are applicable to this part of the module on tests of controls:

- The three lines of defence in effective risk management and control – January 2013
- The role of internal auditing in enterprise-wide risk management – January 2009

Although reference will be made to important sections of these Position Papers later on in the study guide, you are not at this stage required to study them in detail.

3.3 PRACTICE GUIDES (SUPPLEMENTAL GUIDANCE)

The Practice Guides provide detailed guidance for conducting internal audit activities and include detailed processes and procedures, such as tools and techniques, programmes, and step-by-step approaches, including examples of deliverables. Practice Guides are grouped into four categories, namely General Practice Guides, Public Sector Practice Guides, Global Technology Audit Guides (GTAG) and Guides to the Assessment of IT Risk (GIAT).

The following Practice Guides are applicable to this part of the module on tests of controls:

GTAG 1: *Information technology risk and controls* (2nd ed)

GTAG 2: *Change and patch management controls: critical for organisational success* (2nd ed)

GTAG 3: *Continuous auditing: implications for assurance, monitoring and risk assessment*

GTAG 4: *Management of IT auditing* (2nd ed)

GTAG 8: *Auditing application controls*

GTAG 9: *Identity and access management*

GTAG 10: *Business continuity management*

Developing the IT audit plan

GTAG 11: *Auditing IT projects*

Fraud prevention and detection in an automated world

GTAG 12: *Auditing user-developed applications*

Although reference will be made to important sections of these Practice Guides later on in the study guide, you are not at this stage required to study them in detail.

ACTIVITY 3.1

Do multiple choice questions 1.1 to 1.10 of Assignment 1, tutorial letter 101.

FEEDBACK

Feedback will be provided on these questions after the assignment 1 due date.

Discuss your solutions with fellow students on myUnisa, Discussion Forum.

TOPIC SUMMARY

In this topic you have studied the guidance provided in the IPPF relating to tests of controls. You learnt which components of the IPPF can and should be used to guide tests of control. You also performed activities which are aimed at testing your ability to apply your integrated knowledge of the theory you have learnt in this topic in practical situations.

Now that you have worked through this topic, are you able to

- demonstrate a solid knowledge and understanding of the International Professional Practices Framework's (IPPF) provisions and other guidance which may impact on the way internal auditors perform tests of controls?
- apply the International Professional Practices Framework's (IPPF) and other authoritative guidance when conducting tests of controls?

You may not yet be comfortable about replying "yes" to the second question. Don't worry. You will learn more about applying the IPPF when you study Part C: *Conducting test of controls*.

PART B

Significant factors impacting on conducting tests of controls

Contents

TOPIC 2

Authoritative guidance for conducting tests of controls

Contents

INTRODUCTION AND PURPOSE OF THE TOPIC

The introduction to topic 1 mentioned that the International Professional Practices Framework (IPPF) guides internal auditors to maintain certain standards of conduct while practising in different environments within companies that differ in size, structure and purpose. To be efficient and effective when conducting tests of controls, internal auditors also require a thorough understanding of the rules and regulations that govern the organisations they work for. A mining company in South Africa, for example, operates in a very different environment compared to a bank in Botswana. Legislation pertaining to different countries and business sectors will have an impact on the control environment and risk assessment of different organisations and will eventually result in unique control systems and a different approach to the testing of controls for the different organisations.

In the South African context the most important and comprehensive guidelines for the governing of and control over organisations are contained in the King IV Report and Code on Governance for South Africa as well as in specific legislation: the Companies Act 71 of 2008, the Public Finance Management Act 1 of 1999 and the Municipal Finance Management Act 56 of 2003.

There are also recognised best practices in existence which can be applied when controls are designed and tested. The most common ones are the COSO framework and the COBIT framework which outlines best practices for the design of controls in manual and computerised systems.

Your study of module AUE2602 equipped you with knowledge and skills regarding corporate governance, statutory matters and best practice frameworks. Working through this topic will refresh your memory of the areas covered in the second level and you will develop a more in- depth understanding of some of the important matters likely to have a direct effect on conducting tests of controls.

LEARNING OUTCOMES

When you have worked through this topic you should be able to

- describe, comment on and apply the basic principles of good corporate governance as portrayed in Codes of Corporate Governance such as King IV and relevant South African legislature

- explain the risk-based auditing and combined assurance principles as described in King IV and the Standards
- describe, comment on and apply the basic principles of good control as portrayed in control frameworks such as COSO and COBIT

Study unit 4

Corporate governance and regulatory requirements

Contents

4.1 CORPORATE GOVERNANCE

Corporate governance is described as the system or process whereby companies are directed or controlled. It has also been described as the relationship among various participants when determining the direction and performance of companies, involving shareholders, management and the board of directors. It is about companies being good corporate citizens and all that it entails.

The two key elements of corporate governance concern the following:

- monitoring management performance
- ensuring management's accountability to shareholders and other stakeholders

The very nature of business is to take risks in the expectation of rewards. Inevitably this means that some enterprises perform poorly and their rewards are not appropriate for the amount of risk involved. In extreme cases, enterprises fail.

Good corporate governance is not a guarantee against failure, but it should ensure that there is adequate disclosure of the risks undertaken. If enterprises do run into difficulties, good corporate governance ensures that these are handled with wisdom and integrity, and in the best interest of the enterprise. In addition, these difficulties are adequately communicated to stakeholders if good corporate governance prevails.

In the past, corporate governance arrangements were embodied in company legislation and little else. Thus Companies Acts in South Africa and elsewhere would deal with matters such as the appointment of directors, the operations of boards of directors, the role of auditors and the like. While an extensive academic literature evolved, dealing for example with the principal agent

relationship, there was no other authoritative guidance on corporate governance in South Africa until 1994 when the first King Report was issued.

STUDY

Revise your knowledge of study units in module AUE2602, and see if you are still able to answer the self-assessment questions at the end of each study unit.

Study in Auditing Notes (Jackson & Stent), chapter 4:

- Introduction
- Brief background
- Application regimes for codes of corporate governance
- The King IV on corporate governance for South Africa

The King IV Report and Code on Governance for South Africa

King IV, issued by the King Committee of South Africa in 2009, applies to all entities regardless of the manner and form of incorporation or establishment and whether in the public, private sectors or nonprofit sectors. All entities should by way of explanation make a positive statement about how the principles have been applied or have not been applied. The manner of application will differ for each entity and is likely to change as the aspiring nature of the King Code should drive entities to continually improve governance practices.

4.1.1 Risk-based auditing

STUDY

Study in Auditing Notes (Jackson and Stent), chapter 4:

- Application and disclosure
- Section 2 – King IV Code of corporate governance

Study the discussion on principle 15 of King IV, in Jackson & Stent, chapter 4.

Since King IV requires in principle 15 that internal auditors adhere to the Institute of Internal Auditors' Standards for the Professional Practice of Internal Auditing, it is important to note what the internal auditing standards determine in this regard.

Standard 2010 on *planning* determines as follows:

> *The chief audit executive must establish risk-based plans to determine the priorities of the internal audit activity, consistent with the organisation's goals.*

Standard 2010.A1 further states:

> *The internal audit activity's plan of engagements must be based on a documented risk assessment, undertaken at least annually, the input of senior management and the board must be considered in this process.*

Implementation Standard 2010-1 and 2010-2 provide practical guidance on a risk-based

approach to internal auditing.

STUDY

Study the following Implementation Standards:

2010-1: *Linking the audit plan to risks and exposures*

2010-2: *Using the risk management process in internal audit planning*

When performing tests of controls in business processes/cycles, it is impossible to test all the controls and all the transactions. The auditors have to determine the risks and focus their resources and attention on the high risk areas. Risk assessment should therefore be the first step for determining which engagements to undertake and the first step for designing the audit approach in any audit engagement.

STUDY

Study the following sections in Auditing Notes (Jackson and Stent), chapter 7:

Understanding audit risk

Understanding the entity and its environment

4.1.2 Combined assurance

According to the glossary of terms used in King IV, **combined assurance** implies the following: "integration and alignment of assurance processes in a company to maximise risk and governance oversight and control efficiencies, and optimise overall assurance to the audit and risk committee, considering the company's risk appetite".

More simply put, combined assurance is the process of helping organisations to understand the overall levels of assurance required and where they would need to improve or deal with these levels of assurance to effectively manage organisational risk.

The internal and external auditors, as well as other assurance providers (e. g. BEE verification agencies, corporate social responsibility assurors and certification bodies), play an important role in providing assurance to organisations.

King IV recommends that the audit committee should oversee the process of combined assurance being provided to organisations and further recommends that the internal audit activity should act instrumentally to the combined assurance activities performed in organisations.

This corresponds with *Internal Auditing Standard 2050: Coordination*, which requires the chief audit executive to "share information and coordinate activities with other internal and external providers of assurance and consulting services to ensure proper coverage and minimize duplication of efforts".

STUDY

Study the discussion on principle 15 of King IV, in Jackson & Stent, chapter 4.

Discussion

Through suggesting the combined assurance approach, King IV aims to promote a more structured and controlled effort to provide assurance on the organisation's management of its identified risks.

For organisations to ensure combined assurance, they should

- perform a comprehensive risk assessment
- prioritise risks
- implement adequate controls to ensure the residual risk is within tolerable parameters
- monitor controls internally
- obtain internal assurance that controls are working as intended
- obtain independent assurance that controls are working as intended and that they are tackling the identified risks

Combined assurance asks for a coordinated and controlled approach to conduct the last three steps mentioned. A formal plan needs to be established for the risks to be controlled, indicating the level of assurance required, the frequency of such assurance and how and by whom such and hence assumes the overall responsibility and accountability for all identified strategic risks.

STUDY

Study Implementaion Standard 2050-2: Assurance Maps

REFLECTION

What did the above study reference teach you about assurance maps?

FEEDBACK

- Assurance mapping is a technique used to coordinate assurance activities to ensure resources are used in the most eficent and effective way.
- Drawing up an assurance map involves the mapping of assurance coverage pro- vided by different assurance providers against the key risks in an organisation.
- The purpose of coordinated assurance is to ensure that there is a comprehensive risk and assurance process with no duplicated effort or potential gaps.
- Assurance maps assist to identify and address any gaps or duplications in the organisation's risk management and assurance processes.
- The mapping is done accross the organisation to understand where the overall risk and assurance roles and accountabilities reside.
- Assurance maps could have the following columns:

Significant risk category*	Inherent risk rating	Residual risk rating	Management's (risk owner's) role	Internal assurance	External assurance	Other assurance

*** The name of the risks listed here should correspond directly with the risk register. If the risk register changes, the assurance map should also change.**

- Each significant unit within an organisation could have its own assurance map. Alternatively, the internal audit activity may play a coordinating role in developing and completing the assurance map for the organisation.

- If significant risks with inadequate assurance coverage or areas of duplicated assurance coverage, can be identified, senior management and the board should consider changes in assurance coverage for these risks.
- The internal audit activity should consider areas of inadequate coverage when developing the internal audit plan.
- In organisations where the Chief Audit Executive (CAE) is required to express an opinion on the organisation's governance, risk management and control processes, the CAE needs to understand the nature, scope and extent of the integrated assur- ance map to consider the work of other assurance providers before presenting such an opinion.
- In organisations not requiring the CAE to provide an overall opinion, the CAE can act as the coordingator of assurance providers to ensure there are either no gaps in assurance, or the gaps are known and accepted. The CAE reports on any lack of input/involvement/oversight/assurance over other assurance providers and if the CAE believes that the assurance vocerage is inadequate or ineffective, he informs senior management and the board accordingly. Assurance maps offer an effective way of communicating this coordination.

Organisations are sure to reap the rewards of well-managed combined assurance efforts. The following **benefits of combined assurance** have been identified:

- All the assurance efforts within an organisation are coordinated and focus on the key risks.
- Remedial actions taken are prioritised and thoroughly tracked.
- Business disruptions are minimised.
- Reporting to boards and committees on risk management is coordinated and improved.
- The cost of assurance may be reduced.
- Demands by assurance providers to expand their scope may be reduced and better managed.
- Combined assurance plans and reports will support the audit committee and the board when they make their control assessment statements in the integrated reports.

The following **critical success factors** have been identified to help ensure successful combined assurance efforts:

- Successful combined assurance efforts require the support of executive manage- ment and the buy-in of all participants.
- A party should be identified to drive the combined assurance effort. (This could be the internal audit activity.)
- The combined assurance framework should be discussed with all assurance pro- viders and agreement should be reached on the methodology, risk language and technology used to manage the process.
- The quality of assurance providers and the assurance provided should be evaluated and monitored.
- The organisation's management should be clear on the organisation's risk appetite, tolerance, desired level of assurance required and the party that should be responsi- ble for providing such assurance.
- The combined assurance approach should be clearly communicated throughout the organisation.
- All involved should have a clear understanding of the plan, its objectives, processes and outputs.

As indicated above, it is critical for the success of combined assurance efforts that reliance can be placed on the assurance providers and that all involved should have a clear understanding of the plan, its objectives, processes and outputs. The IPPF

provides guidance on this issue in Practice Advisories 2050-1 and 2050-3, which we will discuss next.

STUDY

Study the following IIA Standards (IPPF) as discussed in the AUI2601 Study guide, Topic 3:

Standard 2050-3: *Relying on the work of other assurance providers*

4.1.3 Coordinating internal and external auditing efforts

Since internal and external auditors are the main assurance providers for an organisation's internal control systems, it is important at this stage to recognise the different purposes of the external and internal auditors. Despite both professions utilising the accounting system and management controls to provide assurance to the various stakeholders, their objectives are fundamentally different.

External auditors examine the accounting systems and controls and test the underlying transactions that inform the figures disclosed in the annual financial statements, in order to express an opinion about the fair presentation of the financial statement disclosures, aimed primarily at external users (predominantly shareholders).

Internal auditors, on the other hand, frequently examine the same systems and controls but from the perspective of evaluating whether significant risks, which can derail the organisation from achieving its objectives, are adequately mitigated. Unlike external auditors, the efforts of internal auditors are primarily aimed at internal users. Internal auditors provide assurance to the board, audit committee and top management that effective risk mitigation is consistently being applied to help ensure that strategic and operational objectives will be achieved, while advising management on how to enhance risk management and control within its major operations. Internal auditors test the underlying transactions to confirm the adequacy of operational and financial systems and to assess the potential impact of any operational weaknesses identified.

To better understand the different roles of internal and external auditors, it is perhaps necessary to consider a brief comparison of the two.

Comparison of the roles of internal and external auditors		
Factor	**Internal audit**	**External audit**
Objective	Sound risk management and controls	Accounts = true and fair view
Scope of work	Overall systems: value for money, fraud, management information systems and compliance	Accounts, profit and loss account, balance sheets, annual report and financial systems
Independence	From operations by professionalism and status	From company via statutory rights and codes issued by the South African Association of Chartered Accountants' Accounting Practices Board (APB).
Structure	Varies: chief audit executive, managers, seniors and assistants	Partners, managers, seniors and trainees
Staff	Competent persons trained in internal auditing	Qualified and part qualified accountants

Comparison of the roles of internal and external auditors		
Factor	**Internal audit**	**External audit**
Methodology	Risk-based systems-based audits, assurances and consulting work	Vouching and verification and some use of risk-based systems approach
Reports	Comprehensive structured reports to management and the audit committee and brief executive summaries	Brief standardised published reports to shareholders and users of accounts
Standards	IIA and/or other	Various APB statements
Legislation	General not mandatory apart from parts of public sector, but encouraged in most sectors	Companies legislation and various public sector statutes
Size	Varies according to the size of the organisation	All registered companies and public sector small companies may have exemptions

STUDY

- Review Standard 2050: *Coordination* in the Study guide of Aui2601 Topic 3 and Chapter 16, Using the work of internal auditors in Auditing Notes(Jackson & Stent).

- Study the following Implementation Standard: 2050-3:*Relying on the work of other assurance providers* in the AUI2601 study guide

ACTIVITY 4.3

The company you work for has taken over a private mining company who owns and operates two copper mines in South Africa. Your internal audit activity has to provide assurance on the risk management, control and corporate governance processes within the company and does not have the capacity or competence to attend to the added operations. Realising this your CAE has brought it to the attention of the board and audit committee that the internal audit activity will have to rely on other assurance providers in meeting its obligations pertaining to the newly acquired mining company. The following is an extraction of the assurance map that has been drawn up to support the mentioned discussion with the board and audit committee and considers the activities of the mining company:

Significant risk category	Inherent risk rating*	Residual risk rating*	Management's (risk owner's) role	Internal assurance	External assurance	Other assurance
Risk management:						
All the risks have not been identified.	10	6	Mining company has a Risk register, Risk champion.	Existing board risk committee	External audit	
Identified risks are not managed properly.	10	6	Sectional management involved in risk identification.			
Procurement:						
Corrupt procurement practices.	10	7	Procurement procedures checked against procurement practices manual	Audit committee	External audit	
Financial reporting:						
Figures may have been overstated or understated to incur a better selling price.	10	6	Management letters	Audit committee	External audit	Due dilligence reports
Inaccurate values assigned to fixed assets.	10	6	Management letters			
Unfamiliarity with disclosure requirements relating to mining activities.	10	7	Chartered accountant as financial director responsible for preparing financial statements.			

*****1-3: low; 4-6: medium; 7-10: high*

REQUIRED:

1. Describe the nature and purpose of an assurance map.
2. For each risk category, suggest another assurance provider that will lower the residual risk in each area.
3. Describe the internal audit activity's coordination responsibility as it relates to the external auditors.
4. Mention the factors that the internal audit activity should attend to in deciding to rely on assurance provided by other assurance providers.
5. Mention the additional factors that the internal audit activity should attend to where they appoint other assurance providers.
6. List the predominant contributors to combined assurance according to King III.

FEEDBACK

1. **Nature and purpose of assurance maps:**

   Assurance mapping is a technique used to coordinate assurance activities to ensure resources are used in the most eficent and effective way. Drawing up an assurance map involves the mapping of assurance coverage provided by different assurance providers against the key risks in an organisation.

   Assurance maps assist to identify and address any gaps or duplications in the organisation's risk management and assurance processes.

2. **Suggestions for other assurance providers to be appointed in each risk area:**

   Appoint a risk consultant to evaluate the risk evaluation and risk assessment procedures within the mining company and to express an opinion on the reliability of the risk register.

   Appoint forensic auditors to perform a fraud risk assessment on the mining company's procurement activities.

   Appoint qualified sworn assessors to value the mining company's fixed assets.

3. **The internal audit activity's coordination responsibility as it relates to the external auditors:**

   Guidance to the internal auditor for coordinating the internal-external audit relationship is provided in Practice Advisory 2050-1. A summary of this responsibility is found in Chapter 9 of your prescribed book, Reding et al, under the heading: "Coordinating with independent outside auditors."

4. **Factors the internal audit activity should attend to in deciding to rely on assurance provided by other assurance providers:**

   Internal auditors should only rely on the work of other assurance providers if they are sure of the independence, objectivity, competence and proficiency of the assurance provider. Internal audit should therefore:

   - Review the relationship between management and the assurance provider for independence and objectivity.
   - Assess the competencies and qualifications of the assurance provider.
   - Assess the practice of the assurance provider to determine whether their findings are based on sufficient, reliable, relevant and useful information, as required by Standard 2310.
   - Ensure that the work of the assurance provider is appropriately planned, supervised, documented and reviewed and that the evidence are adequate to support the conclusions reached.

- Ensure that findings are reasonable, based on their knowledge of the business environment and the techniques and information used by the assurance provider.

The assessment as described above should lead the internal audit activity to decide on the level of reliance to be placed on the assurance provider and the amount of additional work to be done before assurance can be provided on the results.

5. **Additional factors that the internal audit activity should attend to where they appoint other assurance providers:**

   Where the internal audit activity is hiring the external assurance provider, a formal agreement or contract should be drawn up by the internal auditors that spells out details regarding minimum expectations, nature and ownership of deliverables, methods/techniques to be applied, procedures and data to be used, progress reports and supervision.

6. **Predominant contributors to combined assurance according to King III:**

   - Internal audit
   - Risk management
   - Quality assurers
   - Environmental and occupational health and safety auditors
   - External audit
   - Other external assurance providers
   - Management

4.2 STATUTORY MATTERS

Good governance is not something that exists separately from the law. There is always a link between good governance and compliance with law. The starting point of any analysis on this topic is the duty of directors and officers to discharge their legal duties. This was covered on the second level of your studies in module AUE2602 and at this stage it is important to refresh your knowledge of this important issue.

STUDY

Revise your knowledge of the relevant sections in AUE2602, and see if you are still able to answer the self-assessment questions at the end of the study unit.

Module AUE2602 discussed relevant sections of the Companies Act. Of similar importance to internal auditors are the duties of officers responsible for the governance of public entities and municipalities, governed by the Public Finance Management Act 1 of 1999 (PFMA) and the Municipal Finance Management Act 56 of 2003 (MFMA), as it is determined by these Acts that all such entities should have internal audits performed according to the Standards for the Professional Practice of Internal Auditing.

4.2.1 The Public Finance Management Act (PFMA)

The objective of the PFMA is to provide for effective corporate governance of national and provincial government and its agencies and entities, by regulating direction and control and improving transparency and accountability. This is clearly outlined in section 2 of the PFMA which describes the purpose of the Act as being: *to secure transparency, accountability and sound management of the revenue, expenditure, assets and liabilities of the institutions to which this Act applies*.

READ

Read the following sections of the PFMA in *Auditing legislation & standards*:

Section 1: *Definition*

Section 2: *Objectives of the PFMA*

Section 3: *Institutions to which this Act applies*

It is necessary to note that compliance with the provisions of the PFMA is mandatory. As a result, affected national and provincial government departments, agencies and entities do not have a choice over whether or not to comply with the PFMA. Effective corporate governance is compulsory for all affected government institutions, with very specific guidance provided on how these organisations should be governed. This guidance is found in the Treasury Regulations, which are published by National Treasury according to section 76 of the PFMA. The mandate of the Auditor General (the external auditor of government as prescribed by the Public Audit Act 25 of 2004) includes a duty to report on compliance with the PFMA.

a Responsibility for management and accounting

READ

Read the following sections of the PFMA in *Auditing legislation and standards*:

Section 36: *Accounting officers*

Section 49: *Accounting authority*

Section 50: *Fiduciary duties of Accounting Authorities*

Section 51: *General responsibilities of Accounting Authorities*

Section 57: *Responsibilities of other officials*

Take note of the following in the sections referred to above:

- The direction and control of National and Provincial departments are not done by a board of directors but by the Executive Authority as defined in section 1 of the PFMA.
- The Executive Authority must appoint the accounting officer, according to section 36 of the PFMA.
- As defined by the PFMA public entities have Accounting Authorities, which operate along the same guidelines as Boards of Directors.
- The fiduciary duties of the Accounting Authority are set out in section 50 of the Act.
- The PFMA prescribes the responsibilities of other officials of public entities in section 57.

b Treasury regulations

The Treasury Regulations pertaining to public entities in terms of section 76 of the PFMA are important in the performance of tests of controls.

READ

Read the following section of the PFMA in *Auditing legislation and standards*:

Section 76: *Treasury regulations and instructions*

Follow the link to the draft treasury regulations, Notice 1005 of 2012, issued by National Treasury and browse through the document. Pay particular attention to the index to inform yourself of what is covered in the Treasury Regulations and read parts 3, 4, 5 and 6 of this document.

c External auditors

The external auditor for government departments (national and provincial) is the Auditor General. Section 58 of the PFMA regulates the external auditors of public entities. Public entities may appoint external auditors if the Auditor General is not appointed as the external auditor. The appointment of the external auditor can only be done after consultation with the Auditor General.

d Internal auditors

According to section 38 (a) of the PFMA, accounting officers are responsible for implementing a system of internal audit under the direction and control of the audit committee in national and provincial departments. According to section 51 of the Act, the accounting authority of public entities is responsible for implementing a system of internal audit. The Treasury regulations regarding internal audit for departments are found in chapter 5 of the draft treasury regulations.

e Audit committees

Audit committees are referred to in section 77 of the PFMA. Specific guidance regarding audit committees for departments is found in chapter 6 of the draft treasury regulations. Both departments and public entities may share audit committees with other departments or public entities to limit costs and to obtain the expertise of qualified members.

4.2.2 The Municipal Finance Management Act (MFMA)

The objectives of the MFMA are to secure sound and sustainable management of the financial affairs of municipalities and other institutions in the local sphere of government, to establish treasury norms and standards for the local sphere of government and to provide for matters connected therewith.

From the above, it is clear that the MFMA regulates the direction and control of local government. The objective of the MFMA is to provide good corporate governance in local government (municipalities). It is important to note that compliance with the MFMA is compulsory; therefore local government must comply with the MFMA. Very specific guidance exists on how local government organisations should be governed.

For the purpose of this module, you do not have to read the MFMA, but take note of the following particulars about the governance of local government institutions.

a. Responsibility for management and accounting

When the structures of local government are compared to those of a company, the municipality's council could be regarded as the board of directors, with the mayor or chairperson of council being regarded as the chairperson to the board and the municipal manager the chief executive officer (CEO).

Chapter 7 of the MFMA deals with the roles and responsibilities of the mayor and chapter 8 with the roles and responsibilities of other officials, including that of the municipal manager. The mayor has general responsibilities, but the most important responsibilities concern the budgetary process and budgetary control.

The municipal manager is regarded as the **Accounting Officer** (CEO) of the municipality with a primary responsibility for the financial management of the municipality. The roles and responsibilities of other officials focus on the financial administration.

b. External auditors

The external auditor for local government (municipalities) is the Auditor General. Chapter 12 of the MFMA regulates the Financial Reporting and Auditing of municipalities.

c. Internal auditors

According to section 165 in chapter 14 of the MFMA, **each municipality and each municipal entity must have an internal audit unit (IAU).** The MFMA allows the IAU to be outsourced to assist the municipality or the municipal entity to develop its internal capacity. However, the municipal council or the board of directors should ensure that it is cost-effective to outsource the IAU.

d. Audit committees

Audit committees are referred to in section 166 in chapter 14 of the MFMA, which clearly stipulates that each municipality and municipal entity must have an independent audit committee.

SELF-ASSESSMENT QUESTIONS

Answer the following questions to test your knowledge of study unit 2.1:

1. Identify the legislation and regulations governing organisations in South Africa and identify the particular organisations they apply to.
2. List the requirements for **audit committees** provided in the *Companies Act No 71 of 2008* and the *Public Finance Management Act No 1 of 1999*.

FEEDBACK

Feedback on questions 1 and 2 above

Question 1

The Companies Act 71 of 2008 applies to companies in South Africa.

The Public Finance Management Act 1 of 1999 (PFMA) applies to all affected government institutions.

The Municipal Finance Management Act 56 of 2003 (MFMA) applies to municipalities and other institutions in the local sphere of government.

Study unit 5

Control best practices

In study unit 2.1 you studied the effect that Acts and regulations have on controls. To assist organisations with the development of comprehensive control systems, control frameworks have been developed which are internationally recognised and have been acknowledged as best practices for implementing controls in organisations. Reding et al describe a "framework" as a body of guiding principles that form a template against which organisations can evaluate a multitude of business practices.

READ

Use Google and search for the COSO and COBIT frameworks and read through it.

STUDY

Refresh your knowledge of the components of internal control by revising *Components of internal control* in AUE2602 and see if you are still able to answer the self-assessment questions at the end of the study unit.

Study Auditing Notes (Jackson & Stent) , chapter 5: Internal control

TOPIC SUMMARY

In this topic you have studied the most important and comprehensive guidelines for the governing of and control over organisations as contained in the King IV Report as well as specific legislation: the Companies Act 71 of 2008, the Public Finance Management Act 1 of 1999 and the Municipal Finance Management Act. You also revised the components of internal control as discussed in AUE2602 and you have taken note of the frameworks depicting best practices for control within organisations, the most common of which are the COSO and COBIT frameworks.

Now that you have worked through this topic, are you able to

- describe, comment on and apply the basic principles of good corporate governance as portrayed in Codes of Corporate Governance such as King III?
- explain the risk-based auditing and combined assurance principles as described in King III and the Standards?
- describe, comment on and apply the basic principles of good control as portrayed in control frameworks such as COSO and COBIT?

TOPIC 3

Internal control systems

Contents

INTRODUCTION AND PURPOSE OF THE TOPIC

As indicated in the introduction to this module, the module focuses on tests of controls in financial or accounting systems. AUE2602 discussed the controls in five different business cycles. In this topic you will refresh your memory of the different business cycles and controls pertaining to each system.

The business cycles covered are

1. The revenue and receipts cycle
2. The acquisitions and payments cycle
3. The inventory and production cycle
4. The payroll and personnel cycle
5. The finance and investment cycle

LEARNING OUTCOMES

When you have worked through this topic you should be able to

- identify and distinguish between controls applicable to the different business processes/cycles
- identify and deal with or give advice about the relevant aspects of information systems and information technology to incorporate in the testing phase of the internal audit

Study unit 6

Internal control in business cycles/processes

Contents

For the purpose of auditing, an entity's information system is generally divided into business processes or transaction cycles. This enables the auditor to gather evidence by examining the process of related transactions from their origin to their ultimate disposition in accounting journals and ledgers.

STUDY

Refresh your memory of the different business cycles by revising your knowledge of AUE2602 and test your knowledge by answering the self-assessment questions at the end of the study unit.

6.1 THE REVENUE AND RECEIPTS CYCLE

The revenue process focuses on the sale of goods and services to customers. Together with acquisitions, revenue represents the two major business processes for almost every organisation.

STUDY

Refresh your memory of the revenue and receipts cycle by revising the study guide of AUI2602 and test your knowledge by answering the self-assessment questions at the end of each study unit.

Study Auditing Notes(Jackson and Stent), chapter 10:

- Accounting system and control activities
- Narrative description

SELF-ASSESSMENT QUESTIONS

List at least ten of the documents and records included in the revenue and receipts cycle.

FEEDBACK

Compare your list to the following:

- customer sales order
- credit approval form
- pending order report
- delivery/despatch document/delivery note.
- sales invoice
- sales journal
- customer statement
- accounts receivable subsidiary ledger
- age analysis of accounts receivable
- remittance advice
- cash receipts journal
- credit note
- write-off authorisation

SELF-ASSESSMENT QUESTIONS

One of the most important controls in any accounting system is proper segregation of duties. Describe how duties should be segregated in the revenue and receipts cycle to prevent errors and fraud.

FEEDBACK

The following table contains some of the key segregations of duties for the revenue receipts cycle, as well as examples of possible errors or fraud that can result from conflicts in duties.

Segregation of duties	**Possible errors or fraud resulting from conflict of duties**
The credit function should be segregated from the invoicing function	If one individual has the ability to grant credit to a customer and also has responsibility for invoicing that customer, it is possible for sales to be made to customers who are not creditworthy. This can result in bad debts.
The delivery/despatch function should be segregated from the invoicing function	If one individual who is responsible for delivery/despatch of goods is also involved in the invoicing function, it is possible for unauthorised shipments to be made and for the usual invoicing procedures to be circumvented. This can result in unrecorded sales transactions and theft of goods.

The accounts receivable function should be segregated from the general ledger function	If one individual is responsible for the accounts receivable records and also for the general ledger, it is possible for that individual to conceal unauthorised shipments. This can result in unrecorded sales transactions and theft of goods.
The cash receipts function should be segregated from the accounts receivable function	If one individual has access to both the cash receipts and the accounts receivable records, it is possible for cash to be diverted and the shortage of cash in the accounting records to be covered. This can re- sult in theft of the entity's cash.

Source: Crous, C, Lamprecht, J, Eilifsen, A, Messier, WF Jr, Glover, SM & Prawitt, DW. (2012)

6.2 THE ACQUISITIONS AND PAYMENTS CYCLE

The acquisitions and payment cycle involves the purchasing of goods, services and assets which are directly used to generate revenue from business activities. The two major activities in this cycle are

- the ordering and receiving of goods (or services) from suppliers
- the payment of amounts due for the goods ordered and received

According to Jackson & Stent the acquisition phase of the cycle attempts to ensure that the organisation orders and receives only those goods which it requires and that the goods are of a suitable quality and price. The second phase of the cycle attempts to ensure that only goods that have been validly ordered and received are paid for and that payment is authorised, accurate and timeous. The cycle is also referred to as the purchases and payments cycle.

STUDY

Refresh your memory of the acquisitions and payments cycle by revising the study guide of AUI2602 and test your knowledge by answering the self-assessment questions at the end of each study unit.

Study Auditing Notes (Jackson and Stent), chapter 11:

- Accounting system and control activities
- Narrative description

SELF-ASSESSMENT QUESTIONS

Which accounts are likely to be affected by purchase transactions?

FEEDBACK

Accounts payable

Inventory

Purchases or cost of goods sold Various

assets and expense accounts

SELF-ASSESSMENT QUESTIONS

One of the most important controls in any accounting system is proper segregation of duties. Without proper segregation in the acquisitions and payments cycle, errors and fraud can occur, such as

- theft of goods and unauthorised purchases
- theft of cash and/or overpayment for goods and services
- documenting unauthorised transactions
- concealing misappropriation of fund or other fraudulent acts.

Indicate how duties should be segregated in the acquisitions and payments cycle to limit these type of errors/fraud.

FEEDBACK

One of the most important controls in any accounting system is proper segregation of duties. Without proper segregation in the acquisitions and payments cycle, errors and fraud can occur, such as • documenting unauthorised transactions	• theft of goods and unauthorised purchases • concealing misappropriation of fund or other fraudulent acts.	• theft of cash and/or overpayment for goods and services
Indicate how duties should be segregated in the acquisitions and payments cycle to limit these type of errors/fraud.		
One of the most important controls in any accounting system is proper segregation of duties. Without proper segregation in the acquisitions and payments cycle, errors and fraud can occur, such as • documenting unauthorised transactions	• theft of goods and unauthorised purchases • concealing misappropriation of fund or other fraudulent acts.	• theft of cash and/or overpayment for goods and services

This answer is based on information obtained from Crous et al (2012).

6.3 THE INVENTORY AND PRODUCTION CYCLE

For most manufacturing, wholesale and retail organisations, inventory is a significant element of the statement of financial position. The complexity of auditing inventory may be affected by the degree

of processing required to manufacture products. In a merchandising business, products are purchased directly from suppliers with little or no additional processing by the entity before sale. In such cases, verifying inventory is relatively straightforward. When the production process involves numerous steps, controlling of and determining the value of inventory become more difficult.

STUDY

Refresh your memory of the inventory and production cycle by revising the study guide of AUE2602 and test your knowledge by answering the self-assessment questions at the end of the study unit 6.1.

Study Auditing Notes(Jackson and Stent), chapter 12:

- Accounting system and control activities
- Narrative description

SELF-ASSESSMENT QUESTIONS

Mention the documents involved in an inventory and production cycle.

FEEDBACK

- goods received note
- materials requisition
- materials issue note
- manufacturing/production schedules
- job cards
- production report
- costing schedule
- transfer to finished goods note
- picking slip and delivery notes
- inventory sheet
- inventory tag
- inventory adjustment form

Segregation of duties is of particular importance in the inventory and production cycle, due to the potential for theft and fraud. Individuals involved in inventory management and inventory warehouse functions should not have access to the inventory records, the cost accounting records or the general ledger. When the inventory records are maintained in a computerised environment, there should be clear segregation of duties within the information technology department.

The following errors and fraud can occur if adequate segregation of duties is not in place:

- If the individual responsible for inventory management also has access to the cost accounting records, production and inventory costs can be manipulated. This may lead to an overstatement or understatement of inventory or net income.
- If one individual is responsible for both controlling and accounting for inventory, unauthorised shipments can be made or theft of goods can be covered up.
- If one individual is responsible for the inventory records and also for the general ledger, it is possible for that individual to conceal unauthorised shipments. This can result in the theft of goods, leading to an overstatement of inventory.
- If the individual responsible for production management or inventory warehouse

function is also responsible for physical inventory, it is possible that inventory shortages can be covered up through the adjustment of the inventory records to the physical inventory, resulting in an overstatement of inventory.

Source: Crous et al (2012)

SELF-ASSESSMENT QUESTIONS

The following activities take place in the production and inventory cycle:

1. Preparation of production schedules
2. Issuance of materials requisitions that accompany goods to the manufacturing department
3. Updating of cost records with manuals
4. Updating of inventory records
5. Release of goods to the shipping department
6. Approval and issuance of purchase requisitions

The following departments are responsible for these activities:

- Inventory management
- Raw materials warehouse
- Finished goods warehouse
- Cost accounting department
- Information technology department

Indicate which department should be responsible for which activities.

FEEDBACK

	Inventory management	Raw materials warehouse	Finished goods warehouse	Cost accounting department	IT department
1. Preparation of production schedules	X				
2. Issuance of materials requisitions that accompany goods to the manufacturing department		X			
3. Updating of cost records with manuals				x	x
4. Updating of inventory records				X	X
5. Release of goods to the shipping department			X		
6. Approval and issuance of purchase requisitions	X				

6.4 THE PAYROLL AND PERSONNEL CYCLE

All organisations have salaries and wages as part of their expenses. When wages have to be paid out, they are calculated by the accounting department of the organisation, for example by referring to clock cards. A worksheet is compiled which contains information on each individual employee, and a single cheque is made out for the total net wages and then cashed. The cash is paid out to the workers at a wage payout. Salaries are calculated per employee on a monthly basis, and a payment is made to the employee (mostly by electronic fund transfer) for each employee's net salary.

STUDY

Refresh your memory of the payroll and personnel cycle by revising the study guide of AUI2602 and test your knowledge by answering the self-assessment questions at the end of each study unit.

Study Auditing Notes(Jackson and Stent), chapter 13

- Accounting system and control activities
- Narrative description

SELF-ASSESSMENT QUESTIONS

Mention the five distinct functions of the payroll and personnel cycle as identified by Jackson & Stent.

FEEDBACK

1. personnel (human resources)
2. timekeeping
3. payroll preparation
4. payment preparation and payout
5. deductions payment and recording

REFLECTION

Can you recall the activities taken care of by each of these functions?

Refer to Jackson and Stent for more information.

FEEDBACK

On the basis of the control actvities and the normal transaction flow for wage transactions in a computerised system, describe the appropriate internal controls that would make it possible to

(a) ensure that all staff appointments and resignations, changes to wage rates and the weekly total net wages payable are authorised (occurrence and validity)

(b) ensure that the accounting accuracy of all wage trasactions has been checked and the information substantiated by supporting documentation and records (measurement)

FEEDBACK

Internal controls for wages in a computerised environment to make it possible to

(a) ensure that all staff appointments and resignations, changes to wage rates and the weekly total net wages payable are authorised (occurrence and validity)

Internal controls:

- Logical access controls allow only authorised personnel to add new employees and record terminations in the employee master file.
- Printouts are produced of all changes to standing data on the employee master file.
- Logical access controls allow only authorised personnel to make changes to standing data on the employee master files.
- Printouts are produced of all changes to standing data on the employee master file.
- The pay sheet for the total net wages payable must be authorised by the senior salary and wages officer by means of his or her signature on the payroll.

(b) ensure that the accounting accuracy of all wage trasactions has been checked and the information substantiated by supporting documentation and records (measurement)

Internal controls:

- Programmed limit and reasonableness checks of hours worked as well as input validation checks of employee name and code numbers.
- Programmed calculations of weekly and monthly payrolls from hours worked re- cords and standing data for gross pay rates and deductions and the analysis of cost allocations, and automatic production of the payroll printouts and individual pay slips for employees.
- Exception reports printed of employees' names or code numbers duplicated or omitted from the payroll; hours worked in excess of norms; and the analysis of cost allocations, and automatic production of the payroll printouts and individual pay slips for employees.
- For each employee there should be a clock card showing the hours worked and a permanent record showing the rate per hour and the authorised deductions.
- The senior disbursement clerk should make certain that there is a clock card for each employee and check that only authorised rates have been used for calculating wages.

Source: Puttick & Van Esch (2007:780-786)

SELF-ASSESSMENT QUESTIONS

Suggest relevant internal controls for ensuring that adequate control over the wage disbursements will be exercised in the following practical situation:

Steelworks Limited has 1 000 workers who receive a weekly cash wage. The manager of the company has approached you with the request to help management to implement internal controls for wage payments, a matter which is causing them problems. The manager of the company is satisfied that there is sufficient control over the clocking of hours worked by the employees and the calculation and recording of the wages payable.

FEEDBACK

Proposed internal controls for a wage payout:

- Arrangements should be made for the physical security of the cash that will be paid as wages in order to restrict access to the cash.
- Pay slips showing the amount payable to an employee should be handed to the

employee together with a sealed wage envelope.

- Disbursement should take place in the presence of an authorised official who will ensure that the handing over of the wage envelopes takes place in an orderly manner.
- Employees should be properly identified by the checking of their identity numbers or identity cards before their wages are paid to them.
- The disbursement clerk should mark off all the wages that are paid out on the wage record or payroll.
- Employees should sign the wage record or payroll as evidence that they have received their wages.
- Wage envelopes that have not been handed over should be marked as unclaimed, and the disbursement clerk and a responsible person should compare unclaimed wages with the wage record and sign the wage record as evidence that the check has been carried out.
- The unclaimed wages should be handed over to a responsible person, such as one of the cashiers, who will record them in an unclaimed wages register.

Source: Puttick & Van Esch (2007:784 -786)

6.5 THE FINANCE AND INVESTMENT CYCLE

The finance and investment cycle essentially deals with those transactions which a company enters into to raise finance, for example by issuing shares, or borrowing money from a bank or investment company. The cycle also deals with the investments the company makes, whether in property, plant and equipment, making long-term loans or investing surplus funds.

STUDY

Refresh your memory of the finance and investment cycle by revising the study guide of AUE2602 and test your knowledge by answering the self-assessment questions at the end of each study unit.

Study Auditing Notes(Jackson and Stent), chapter 14:

- Accounting system and control activities
- Narrative description

SELF-ASSESSMENT QUESTIONS

One of the significant risks associated with the finance and investment cycle is that assets may be overstated and liabilities may be understated to improve the financial statements. Describe three methods that can be used to understate liabilities and three methods that can be used to overstate assets.

FEEDBACK

Methods that could be used by organisations to understate liabilities and overstate assets:

Understating liabilities

- omitting long-term liabilities (e.g. failing to record a new loan and disguising the inflow of cash as income)
- understating or omitting provisions/allowances (e. g. not providing for long-term environmental damage which the company has an obligation to rectify).
- omitting or inadequately disclosing contingent liabilities (e.g. the company makes no mention in the notes of a pending lawsuit) which may have grave consequences for the company

Overstating assets

- creating unjustified reserves with a corresponding increase in fixed assets (e.g. obtaining an inflated property valuation from an estate agent)
- overstating property, plant and equipment, etc, by including fictitious assets or as- sets which the company does not own (e.g. including the assets of a related party)
- overstating plant and equipment, vehicles, etc, by understating depreciation allowances and impairments (e.g. failing to write down obsolete/impaired machinery)
- overstating investments in listed and/or private companies (e. g. failing to write down the cost of investments in private companies, where the fair value of the in- vestment has decreased)

Source: Jackson & Stent (p 14/3)

Study unit 7

Internal control in information systems

All organisations these days use information systems and these will tend to be automated with internal networks and links to the internet. The risks from unauthorised access, unauthorised use of data, system crashes and poor information and reports can cause an organisation to fail altogether.

STUDY

Refresh your memory of controls in a computerised environment by revising the study guide of study unit of AUE2602 and test your knowledge by answering the self-assessment questions at the end of the study unit.

Study Auditing Notes(Jackson and Stent), chapter 8.

ACTIVITY 7.1

Do multiple choice questions 1.11 to 1.20 of Assignment 1, tutorial letter 101.

FEEDBACK

Feedback will be provided on these questions after the assignment 1 due date.

Discuss your solutions with fellow students on myUnisa, Discussion Forum.

TOPIC SUMMARY

This study unit discussed the controls in business cycles or processes. You were referred to your second level studies and also looked at controls from an internal auditing perspective by studying the relevant chapters in Reding et al. You should now be prepared and ready to learn how to perform tests of controls. This will be dealt with in the following topics.

Now that you have worked through this topic, are you able to

- identify and distinguish between controls applicable to the different business processes/ cycles?
- identify and deal with or give advice about the relevant aspects of information systems and information technology to incorporate in the testing phase of the internal audit?

PART C

Conducting tests of controls

Contents

TOPIC 4

Methods and techniques for testing controls

Contents

INTRODUCTION AND PURPOSE OF THE TOPIC

Students who are also enrolled for AUI3701: *Planning an Internal Audit*, and who have also passed AUI2601: *Introduction to Internal Auditing* should know that internal auditors follow a systematic process when performing auditing engagements. This process is summarised in Reding et al, Exhibit 13-2. AUI3701 focuses on the planning of internal audit engagements while this module (AUI3702) focuses on performing assurance engagements on business cycles and more specifically tests of controls in financial cycles/processes. Module AUI3703: *Specific audit assignments and reporting* focuses on the performance of other assurance and consulting engagements, for example compliance audits, operational audits and environmental audits.

You should, therefore, keep in mind that by the time you come to conduct tests of controls, you have already performed the necessary engagement planning which means that you have gained an understanding of the auditee and the area subject to audit, you have done a proper risk assessment, you have analysed the auditee's system of control, and you have developed a work programme (including the audit objectives and audit procedures). At this stage you would use the information you have gathered and the significant risks you identified during the preliminary review to focus the deployment of your audit resources in such a manner that you can optimally achieve the objectives according to the engagement plan.

Those students who are enrolled for the Internal Auditing degree should at this stage know that the next step will be to determine the audit objectives and audit procedures, and they will know what these concepts imply. Those students who are taking internal auditing as part of other degrees and have only done AUE2602 may, however, feel left in the dark. This topic goes a couple of steps back into the planning stage of the audit process until the stage where the auditors have gained a good understanding of the area (in this case, the business cycle) that they are about to audit. They have anticipated all the risks and understand the controls that are and should be in place to manage the risks.

REFLECTION

Do you understand the different business cycles and do you know the risks and controls associated with each cycle? If not, you should go back to the previous topic and study it more carefully.

LEARNING OUTCOMES

When you have worked through this topic you should be able to

- identify, give advice or criticise the methods and techniques applied when perform- ing tests of controls
- apply or give advice on the relevant and appropriate sampling techniques for a giv- en situation
- draw a sample and extrapolate the results of the sample to the population

Study unit 8

Auditing methods and techniques for testing controls

Contents

To be able to develop tests of controls it is important to know how to formulate engagement **objectives,** what engagement **procedures** are and how different types of **audit tests** can be used to obtain **audit evidence**. These concepts will be discussed next.

8.1 ENGAGEMENT (AUDIT) OBJECTIVES

According to the internal auditing standards, engagement objectives (also referred to as audit objectives) are broad statements developed by the internal auditor that define the intended engagement accomplishments. These statements will not limit the scope of the investigation and will ensure that the purpose of the engagement is still accomplished. The objectives must enable the internal auditors to add value to and improve the operations of the engagement activity (department/section/unit audited), as well as those of the organisation as a whole.

STUDY

Revise your knowledge of Standards 2210, 2210. A1, 2210. A2 and 2210. C1 **on engagement objectives,** which you studied in topic 1.

Engagement objectives depend on organisational objectives. The engagement objective (s) should be established for each audit engagement and should be formulated with reference to the following:

- *The provisions of the charter.* Do the internal auditors have the mandate to perform such audits?
- *The requirements of the audit committee*. Has the audit committee approved the annual audit plan and does the audit plan make provision for the specific engagement?

- *The origin of the assignment*. Is the assignment conducted on request of a certain party or does it form part of the assurance activities of the internal audit function? (This is normally the case with tests of controls.)
- *The consideration of the risk assessment*. Have the most significant risks been identified?

Engagement objectives should reflect the results of the preliminary survey (the information that the auditor obtained about the audit client and the cycle/process to be tested) and should address the risk management, control and governance processes associated with the activities under review. The auditor should also consider the probability of significant errors, irregularities, non-compliance and other exposures. To do so, the internal auditor will have to rely on his or her experience and knowledge of the specific auditee.

To illustrate the link between organisational objectives, risks, internal control and engagement objectives, let's go back to the example in the introduction to this module.

We have assumed that one of your objectives in life is to obtain a degree at Unisa and we have identified **not having adequate time to study** as one of the risks you are probably facing. We have identified the controls you will probably put in place to counter the risk and went on to think of some tests of controls you can perform.

Risks	Controls	Tests of controls
	• Diarise deadlines for assignments and plan time to complete them.	• Confirm with your work and friends that you have diarised all commitments and that you still have time to complete the assignments as planned.
	• Arrange adequate study leave in advance to prepare for exams.	• Obtain written approval of your leave arrangements from management.
	• Limit social activities to weekends only.	• Page through your diary for the next two weeks to ensure that you are not engaging in social activities during the week.

Why would you perform the tests of controls? Answering this question will determine the audit objective and to make sure that you do not waste time and do unnecessary work, you have to ask the "why" question **before** you develop the tests of controls. The auditors have to decide which of the controls would be most suitable to control the identified risk and focus their resources on testing those controls that they have decided to rely on.

In the above example, you may decide that you will rely most on having adequate time to prepare for the examination. Your audit objective will then be "**to determine whether my employer has granted me sufficient leave"** and the audit test will be, as indicated, to obtain written approval of your leave arrangements from management.

Formulating engagement procedures to perform tests of controls will be discussed in more detail in topic 5.

8.2 AUDIT PROCEDURES

Once the preliminary survey, the selection of audit objectives and the identification of audit risks are completed, the internal auditor must decide what audit procedures should be performed to achieve the audit objectives. The internal auditor must prepare a comprehensive audit programme or list (audit procedures) that covers the audit objectives.

Audit procedures aim to satisfy the audit objectives. An audit procedure describes the "how" with regard to obtaining assurance that a control is working as intended: What action should the auditors take to determine whether the control is working as intended? The audit procedure instructs the auditors to perform a specific step and tells them how to perform the step in order to achieve the audit objective.

The auditors can choose from a variety of audit tests to include in audit procedures. The best audit test should be used each time to provide the best assurance possible.

STUDY

Study Auditing Notes(Jackson and Stent), chapter 5:

- Financial Statement Assertions
- The auditor's toolbox

Study Auditing Notes(Jackson and Stent), chapter 17:

- Analytical procedures

Audit procedures

Study the following Implementation Standards:

- 2320-1: *Analytical procedures*

The last reference explains the difference between tests of controls and substantive tests. It is important to acknowledge the difference between internal and external auditing here. Internal auditors assess the internal control system and provide assurance to management and control bodies that the system of internal control is working as intended. External auditors express an opinion on the financial statements of an organisation and have to provide assurance that the figures stated are fair and reasonable. Substantive tests are used to verify balances. If internal auditors are requested to provide assurance on the accuracy of transactions and balances, they will also apply substantive tests, but due to the nature and objective of their assignments, they will be more likely to perform tests of controls.

As you will know from your second year studies and after having studied Topic 3, business environments often have both manual and automated internal controls. In order for you to understand and apply test of control concepts in either manual or computerised environments, make sure that you have a good knowledge and understanding of the manual and automated controls which you studied previously.

STUDY

To refresh your memory on auditing principles that you studied in your second year of auditing related to assertions and audit evidence, revise the study guide for AUI2601 and AUE2601.

HOW SHOULD TESTS OF CONTROLS BE FORMULATED?

Tests of controls are formulated by referring to **HOW**, **WHAT** and **WHY**. When you are requested to formulate tests of controls you will have to decide whether to test these by means of *inspecting, observing, reperforming, and inquiring.* Automated controls can be tested by means of system oriented CAATs using *test data*, an *integrated test facility*, *parallel simulation* or *embedded audit facility*.

8.2.1 Formulating tests of controls for manual internal controls:

We will now go on to explain to you how tests of controls should be formulated when testing manual internal controls.

HOW: This is the **verb** that describes the action to the performed. You will find these verbs (audit procedures) in ISA 500 par A14 to A25. Remember that the audit procedures men- tioned in par A14 to A25 may be used as risk assessment procedures, tests of controls or substantive procedures, depending on the context in which they are applied by the auditor.

- **Inspection** → A good example is the inspection of reconciliations for evidence of a signature as authorisation.
- **Observation** → An example is when the auditor observes the inventory count con- trol activities. Observation is not the best audit procedure as it is limited to the point in time at which observation takes place. Be careful not to observe a document. Documents should be inspected.
- **External confirmation** → **Not used** when testing a control, only for substantive procedures.
- **Recalculation** → **Not used** when testing a control, only for substantive procedures.
- **Reperformance** → This is when the auditor reperforms a specific control procedure carried out by the client. For example: reperforming the monthly bank reconciliation to confirm that the internal control of balancing the cash book and the balance per the bank statement has been properly carried out. Reperformance is also considered to be a dual-purpose test.
- **Analytical procedures** → **Not used** when testing a control, only for substantive procedures.
- **Inquiry** → On its own, inquiry is not considered to be sufficient and therefore can be used in combination with other audit procedures. An example is to inquire from the credit controller what functions each member of her department carries out and what control procedures are in place.

From the explanations above, it is clear that you mainly perform tests of controls by in- specting, observing, reperformance and inquiry. Inspect and reperform are the best tests of controls to perform, alternatively if evidence of an internal control cannot be ob- tained by inspecting or reperforming, the auditor can consider whether he can observe or inquire that the internal control is performed correctly.

WHAT: Here you should make reference to the **source document** (e. g. the reconciliation on which the signature is made) and/or the **action (control)** being performed (e.g. count- ing the inventory).

WHY: This describes the **reason** for performing a test of control. What are the **internal control objectives again?**

Occurrence and authorisation:

- **Occurrence** → All recorded transactions and events actually occurred and pertain to the entity.
- **Authorisation** → this objective is mentioned in ISA 315 par A97 and simply means that all transactions are authorised in accordance with entity/management policies.

Completeness and accuracy:

- **Completeness** → All transactions and events have been recorded.
- Cut-off → transactions and events have been recorded in the correct accounting period.
- **Accuracy** → Amounts and other data relating to recorded transactions and events have been recorded appropriately.
- **Classification** → Transactions and events have been recorded in the proper accounts.

For further reference and guidance refer to ISA 315 par A111 (a) pertaining to the assertions.

The following is an example of a **well** worded test of control:

Example 1:

- Inspect the clock card summary reconciliation for the manager's signature as evidence of approval.
  - Inspect = **HOW** = verb
  - Clock card summary reconciliation = **WHAT** = Source document

For the manager's signature as evidence of approval = **WHY** = reason = authorisation (approval)

ACTIVITY 8.1

Formulate **tests of controls** to test the following internal controls:

1. Sales invoices are numbered sequentially.
2. Ordered goods are delivered to the designated goods receiving section in the presence of the receiving clerk who physically counts the goods received and compares the quantity, quality and description with the delivery note and pur- chase order.
3. The acquisition manager signs all the orders before sending these to the suppliers.
4. Outstanding orders are followed up by the administrative clerk in the acquisitions department.
5. During the stock count the store clerk physically compares the quantity of inventory items on the inventory sheet with the counted items on the floor.

FEEDBACK

1. Inspect that invoices are numbered in sequence to confirm that all sales transactions are recorded.
   - Inspect = **HOW** = verb
   - Sequence of invoices = **WHAT** = Source document
   - To confirm that all sales transactions are recorded = **WHY** = reason = completeness.

2. Observe that the receiving clerk physically counts the goods received and com- pare the quantity, quality and description to the delivery note and purchase order.
   - Observe = **HOW** = verb
   - That the receiving clerk physically count the goods received = **WHAT** = action or control being performed.
   - And compare the quantity, quality and description to the delivery note and purchase order = **WHY** = reason = accuracy.

3. Inspect a sample of orders for the signature of the acquisition manager for proof of authorisation.
   - Inspect = **HOW** = verb
   - A sample of orders = **WHAT** = Source document
   - For the signature of the acquisition manager for proof of authorisation = **WHY** = reason = authorisation.

4. Inquire whether outstanding orders are followed up by the administrative clerk to confirm that all orders are received.
   - Inquire = **HOW** = verb
   - Whether outstanding orders are followed up by the administrative clerk = **WHAT** = action or control being performed.
   - To confirm that all orders are received = **WHY** = reason = completeness of orders.

   Note: if the internal control stated that the administrative clerk should sign the register for outstanding orders as proof that the orders are followed up, the auditor should rather inspect the signature in the register to confirm that the action is being performed instead of inquire. Remember inspect is a better test of control than inquire.

5. Reperform the stock count by selecting a sample of inventory items from the inventory sheet and compare the quantity on the inventory sheet with the quantity of items on the floor to test for existence of inventory.
   - Reperform = **HOW** = verb
   - The stock count by selecting a sample of inventory items from the inventory sheet and compare the quantity on the inventory sheet with the quantity of items on the floor to test = **WHAT** = action or control being performed.
   - For existence of inventory = **WHY** = reason = existence.

Well done! You should now have a better understanding of how to formulate a test of control to test manual internal controls.

8.2.2 Formulating tests of controls for computerised systems

The concepts when formulating tests of controls remain unchanged when testing computerised controls. The only difference is that the auditor can use the computer to perform certain tests of controls.

It is highly unlikely that you will ever audit in a fully manual environment. However, even though controls in today's business environment tend to be more automated, there will always still be some manual controls. This means that **testing of manual controls will never fall away** even if an entity has sophisticated automated controls. The only difference when auditing in an automated environment is that in addition to testing manual controls, the auditor may also use test data and other computer assisted audit techniques (CAATs) to test automated controls. One must just be careful as this does not mean that automated controls are only tested by means of test data or CAATs. Activity 1 will illustrate this principle.

STUDY

Study the relevant sections under the heading "Computer assisted audit techniques (CAATs)", namely "Introduction", "How do CAATs fit into the audit process", "System orientated CAATs" and "Factors which will influence the decision to use CAATs" in chapter 8 of Auditing Notes by Jackson and Stent.

Note the following in the above study source:

- The auditor may make use of CAATs to perform audit procedures in a computerised environment.
- The auditor should consider certain factors when deciding whether or not to make use of CAATs.
- The auditor should decide whether to audit around the computer, through the computer, with the computer or to combine some of these approaches.
- The auditor may use system orientated CAATs to test the automated internal controls in a computerised environment.

Remember that general and application controls consist of both manual (user) and computerised (programmed) controls. As you already know, manual controls can be tested by inspection, observation, inquiry and reperformance. As mentioned earlier, automated controls can be tested by means of system oriented CAATs, using either test-data, an integrated test facility, parallel simulation or embedded audit facility. For the purposes of this module you will mostly be required to test automated controls using test data. **Remember that you will never test manual controls by means of test data. Test data is only used to test automated controls.**

We will now go on to explain how a test of control should be formulated to test automated internal controls:

- A test of control using test data should address the following:

HOW: This is the **verb** that describes the action to the performed. Previously we identified the verbs as inspection, observation, external confirmation, recalculation, reperformance, ana- lytical procedures and inquiry. We also identified that you perform tests of controls by inspecting, observing, reperforming and inquiring. When you are testing an internal con- trol by means of test data, you are **reperforming** the internal control to establish whether it is working effectively. You will mostly start your sentence with "Attempt to …"

WHAT: Here you should make reference to the **action (control)** being performed (e.g. gain access to the system by entering a fictitious username and password).

WHY: This describes the **reason** for performing a test of control. Your test data may either be valid or invalid. With valid test data your action should be accepted and with invalid test data your action should be rejected.

The following are examples of **well** worded test of control using test data:

Example 1:

- Attempt to gain access to the sales system by entering a fictitious username and password and confirm that it is rejected.
  - Attempt to = **HOW** = reperformance when using test data.
  - To gain access to the sales system by entering a fictitious username and password = **WHAT** = action being performed.
  - And confirm that it is rejected = **WHY** = reason = authorisation.

Example 2:

- Attempt to gain access to the sales system by entering a valid username and password and confirm that it is accepted.
  - Attempt to = **HOW** = reperformance when using test data.
  - To gain access to the sales system by entering a valid username and password = **WHAT** = action being performed.
  - And confirm that it is accepted = **WHY** = reason = authorisation.

When we request you to formulate tests of controls we will often provide you with a scenario containing both manual and automated controls and you will have to decide whether to test these by means of inspecting, observing, reperforming, inquiring or by means of using test data which is classified as "reperforming" an internal control.

Let us look at the following activity:

ACTIVITY 8.2

You are a first-year trainee accountant on the audit of Zimbatu Lodge (Pty) Limited (Zimbatu), a very popular game reserve situated in the Limpopo province.

In preparation for the audit for the year ended 31 December 20xx, your audit senior presented you with the following information on the reservations system of Zimbatu.

Reservations

Zimbatu has 150 units that are rented out to holiday makers. The tariffs per person per unit for this financial year vary according to the season as follows:

Season	Tariff per person	Tariff per person sharing
Peak season	R2 300	R1 900
Mid-season	R2 000	R1 600
Off-peak season	R1 700	R1 300

These tariffs are updated annually. The marketing director determines the dates of the different seasons at the beginning of each year. These dates and the corresponding tariffs are captured on the masterfile and approved by the marketing director by entering his username and password.

Zimbatu uses an online reservation system. Potential holiday makers can make a reservation request telephonically by phoning a toll-free number. One of the operators, who mans the terminals seven days a week from 08:00 to 19:00, will look up the availability of a unit for the specific dates online on the system and key in the booking online if the unit is available. The online capturing requires the operator to enter his username and password to gain access to the reservation system before completing the compulsory fields such as the date of reservation, the dates of arrival and departure, the client's particulars and the unit number on the reservation form. Reservation forms are automatically numbered sequentially by the system. The reservation system automatically completes the tariff for the unit number according to the dates captured on the masterfile. The reservation system also calculates the total amount owing as well as the deposit payable by the holiday maker. Once the online reservation is completed, each reservation form is posted to the masterfile.

The computer is set up to automatically print an activity report of access gained and unsuccessful access attempts to the reservation system at the end of each day to a printer only accessible to the financial director. The financial director is responsible for following up on unauthorised access attempts as indicated on the activity report.

A deposit of 50% must be made directly into Zimbatu's bank account one week from the date of making the reservation. A bank statement is printed daily by the accounting department which is obtained by means of an internet link. Accounting staff capture deposits received onto the reservation system on a daily basis. If a deposit is not captured within two weeks, the system automatically cancels the booking. Deposits received after two weeks, for which the system has already cancelled the booking, are refunded to clients by means of internet banking services.

REQUIRED:

Formulate the tests of controls that you will perform to evaluate Zimbatu's **manual and automated** internal controls over the online capturing of reservations. If you make use of audit procedures using test data to test the automated controls, limit your answer to **invalid** test data.

FEEDBACK

To assist you in answering the question, we have listed the following guidelines:

- You are required to formulate tests of controls to test **both manual and auto- mated internal controls**.
- This means that you can test the **manual controls** by **inspecting**, **observing**, **re-performing** and **inquiring**.
- Some of the **automated controls** can be tested by means of **using test data**.
- Remember the question requires you to only describe **invalid** test data. It is also important to note that some automated internal controls can be tested by means of inspecting, observing, reperforming (including by means of test data) and inquiring. Refer to the solution for such examples.
- Make sure that you **do not include** any substantive procedures in your question.
- Relate your answer to the information provided in the question. This means that you should **only test the internal controls described in the question**.

When answering this question, your first step would thus be to identify the internal controls given in the question. Therefore, quickly highlight all the applicable manual

and automated controls in the scenario and then attempt to formulate your audit procedures.

To assist you in identifying the manual and automated internal controls in the scenario, we have included the scenario again and highlighted the manual internal controls in blue. The automated internal controls are highlighted in green.

You are a first-year trainee accountant on the audit of Zimbatu Lodge (Pty) Limited (Zimbatu), a very popular game reserve situated in the Limpopo province.

In preparation for the audit for the year ended 31 December 20xx, your audit senior presented you with the following information on the reservations system of Zimbatu.

Reservations

Zimbatu has 150 units that are rented out to holiday makers. The tariffs per person per unit for this financial year vary according to the season as follows:

Season	Tariff per person	Tariff per person sharing
Peak season	R2 300	R1 900
Mid-season	R2 000	R1 600
Off-peak season	R1 700	R1 300

These tariffs are updated annually. The marketing director determines the dates of the different seasons at the beginning of each year. These dates and the corresponding tariffs are captured on the masterfile and **approved** by the marketing director by entering his username and password (*automated authorisation controls - refer to test of control 1 below*).

Zimbatu uses an online reservation system. Potential holiday makers can make a reservation request telephonically by phoning a toll-free number. One of the operators, who mans the terminals seven days a week from 08:00 to 19:00, will look up the availability of a unit for the specific dates online on the system and key in the booking online if the unit is available. The online capturing requires the operator to enter his **username and password** to gain access (*automated access controls – refer to test of control 2 below*) to the reservation system before completing the **compulsory fields** (*all fields should be completed otherwise the system will not continue – refer to test of control 3 below*) such as the **date** of reservation, the **dates** of arrival and departure, the **client's particulars** and the **unit number** on the reservation form (*the required fields that should be completed are provided which means that tests of controls can be performed on the fields in order to ensure that the fields are captured correctly – refer to tests of controls 4 and 5 below*). Reservation forms are **automatically numbered sequentially** (*automated numbering – refer 6*) by the system. The reservation system **automatically completes the tariff** (*automated control – refer to 7*) for the unit number according to the dates captured on the masterfile. The **reservation system also calculates** (*automated control – refer 8*) the total amount owing as well as the deposit payable by the holiday maker. Once the online reservation is completed, each reservation form is posted to the masterfile.

The computer is set up to **automatically print an activity report of access gained** and **unsuccessful access attempts** (*automated control – refer 9*) to the reservation system at the end of each day to a **printer only accessible to the financial director** (*automated access controls – refer 10*). The financial director is responsible for **following up on unauthorised access attempts** (*refer 11*) as indicated on the activity report.

A deposit of 50% must be made directly into Zimbatu's bank account one week from the date of making the reservation. A bank statement is printed daily by the accounting department which is obtained by means of an internet link. Accounting staff capture deposits received onto the reservation system on a daily basis. If a deposit is not captured within two weeks, the system **automatically cancels** the booking (*automated control – refer 12*). Deposits received after two weeks, for which the system has already cancelled the booking, are **refunded** (manual control – refer 13) to clients by means of internet banking services.

Solution

1. Attempt to approve the dates and tariffs on the master file by entering a fictitious username name and password.
2. Attempt to gain access to the reservation system in order to capture a reservation by entering a fictitious user-name and password.

Comment:

Students often make the mistake of testing a principle more than once and then expect to get more than one mark. For example, students write:

1. Attempt to gain access to the reservation system by entering a **fictitious username.**
2. Attempt to gain access to the booking system by entering a fictitious **password**.

When you test one principle, in this case you are testing the access control; you only re- ceive the mark once. Both of the above answers describe audit procedures testing the access controls to the reservation system; therefore we only award the mark once.

3. Attempt to capture an online reservation form but leave out one of the compulsory fields (e.g. the unit number) and confirm that this has been rejected.
4. Attempt to enter alphabetical characters or numerical digits where none should exist. For example: Enter alphabetical characters when completing the date, and unit numbers or numerical digits when entering the client's name and details.
5. Attempt to enter negative amounts where none should exist (e.g. the unit number).
6. Inspect the reservation forms and confirm that it is issued in sequence for completeness. (**Note**: Even though the reservation forms are numbered automatically, and thus it is an au- tomated internal control, you may test the control by means of inspecting. As mentioned before, not all automated controls are tested by means of test data)
7. **Note:** The reservation system automatically completes the tariff which means that the con- trol is automated. Some automated controls can be tested either by means of CAATs using test data or by inspecting, observing, reperforming or inquiring. The control mentioned in the scenario can be tested as follows (1½ mark each):
   - Attempt to change the tariff by overriding the automatic generation of the correct tariff for a unit on the reservation form.
   - Reprocess a number of reservation forms and follow the tariff that automatically appears through to the tariff list according to the master file.
   - Inspect the tariffs on a sample of reservation forms for different seasons to confirm that the tariffs remained unchanged for the past 12 months as tariffs on the master file are up- dated annually.
8. Reperform the calculation of the total amount owing and deposit payable fields calculated by the computer to ensure accuracy.
9. **Note:** The reservation system automatically prints the activity reports which mean that the control is automated. Even though some automated controls are tested by means of CAATs, for example test data, some automated controls cannot be tested by means of test data. You

can however enquire or observe whether the activity reports are printed each day. The control mentioned in the scenario can be tested as follows (1½ mark each):

- Enquire whether an activity report on access gained to the reservation system is printed at the end of each day.

10. Inspect a sample of activity reports to confirm that (1½ marks each) only authorised users have access to the reservation system

- unauthorised access attempts to the reservation system have been followed up by the financial director

11. Print the activity report on access gained to the reservation system to a printer that is accessible to someone other than the financial director.

12. **Note:** The reservation system automatically cancels the booking which means that the control is automated. Even though some automated controls are tested by means of CAATs, for example test data, some automated controls cannot be tested by means of test data. The control mentioned in the scenario can be tested as follows:

Inspect a sample of reservation forms for which the 50% deposit was not made within two weeks and confirm that the reservation has automatically been cancelled.

13. Inspect bank statements to confirm that all deposits made after two weeks have been refunded to the clients.

REFLECTION

Examination technique when attempting a test of control question

After completing the activity, you should have a better knowledge and understanding of how tests of controls should be formulated in a manual and automated business environment.

A hint on how to attempt a tests of controls question in the examination:

- If you are asked to formulate or describe tests of controls in a question remember that you can only test the internal controls described in the question.
- Your first step would thus be to identify the internal controls given in the question, both the manual internal controls as well as the automated internal controls.
- After identifying the internal controls, you will have to describe tests of controls to test the internal controls you have identified. Describe your tests of controls in terms of **HOW**, **WHAT** and **WHY**.

Tests of controls can be asked in the following manner in the examination:

REQUIRED	**HOW SHOULD YOU ANSWER THE REQUIRED**
*Formulate the **tests of controls** that you will perform to test the **manual and automated** internal controls described in the scenario.*	To answer this type of question, you should describe all relevant tests of controls to **test both manual and automated internal controls**, for example inspect, observe, reperform and inquire including audit procedures using valid and invalid test data.

REQUIRED	HOW SHOULD YOU ANSWER THE REQUIRED
*Formulate the **tests of controls** that you will perform to test the **manual** internal controls described in the scenario.*	To answer this type of question, you should describe tests of controls to **test manual internal controls** only, for example, inspect, reperform, observe, and inquire. You will **not** include any audit procedures using test data.
*Formulate the **tests of controls** that you will perform to test the **manual and automated** internal controls described in the scenario. If you make use of audit procedures using test data to test the automated controls, limit your answer to **invalid** test data.*	To answer this type of question, you should describe all relevant tests of controls to **test both manual and automated internal controls**, for exam- ple inspect, observe, reperform and inquire **including** audit procedures using **invalid** test data only.
*Formulate the **tests of controls** that you will perform to test the **automated** internal controls by using **invalid test data only**.*	To answer this type of question, you should only formulate invalid test data to test the automated internal controls.
*Formulate the **tests of controls** that you will perform to test the **automated** internal controls by using **valid test data only**.*	It is unlikely that we will require you to describe audit procedures using valid test data only. However, to answer this type of question, you should only formulate valid test data to test the automated internal controls.

8.3 AUDIT EVIDENCE

Audit evidence can be defined as

> *all forms of information which are collected during the internal audit process and which the auditor considers necessary in order to realise the stated audit objective(s)*

From this definition it is clear that there are various types of audit evidence. Internal Auditing Standards 2300 and 2330 require auditors to identify, analyse, evaluate and record all relevant information, stating that "internal auditors should record relevant information to support the conclusions and the engagement results".

Therefore the information recorded by auditors, whatever the source, to support the conclusions and results of the engagement, is the audit evidence gathered by them. This information must, however, comply with the following criteria per Standard 2310:

> *Internal auditors should identify **sufficient, reliable, relevant** and **useful** information to achieve the engagement's objectives*.

Depending on what needs to be proved, a single form of audit evidence may be sufficient, but generally a combination of different types of audit evidence is used to substantiate the achievement of a single audit objective.

STUDY

Study the following section in Jackson & Stent, chapter 5:

Audit evidence

Study unit 9

Audit sampling

Contents

9.1 INTRODUCTION

Sampling is an important and valuable aid for the purpose of efficient auditing. Statistical sampling is a scientific method of selecting samples from a population of items and of evaluating the results of the sample scientifically. In this study unit we explain in detail the theoretical basis of sampling as well as the different sampling methods and the way they are used.

Probability theory

The fundamental principle of sampling can be found in probability theory.

Probability theory proceeds from the basic premise that the attributes manifested by a representative sample of a population reflect the attributes of the population itself.

Toss a coin in the air ten times and record the result after each time. Add the totals to determine which side landed on top the most times. Repeat the experiment.

Consider the following questions:

- Are the results of the repeated experiment significantly different from those of the first experiment?
- What happens if you add the results of both experiments?

ACTIVITY 9.1

Probability theory explains why there is no fixed ration between the sample size and the size of the population. This can be illustrated by means of the following simple experiment.

FEEDBACK

If you toss a coin in the air repeatedly, you will notice that the number of times the coin comes up as heads or tails will assume the ratio of 1:1 fairly quickly. Increasing the number of times that the coin is tossed in the air will not result in another ratio. Similarly, a representative sample from a given population will reflect the attributes of the population, and no increase in the size of the sample will result in it reflecting any other attributes.

STUDY

Study Implementation Standard 2320-3: Audit Sampling

Study Auditing Notes (Jackson and Stent) 5:

- *Audit sampling*

9.2 BASIC PRINCIPLES OF SAMPLING

According to the Internal auditing Standards, the internal auditor must obtain adequate audit evidence in support of the contents of the audit report. Sampling is an audit tool which is used by the internal auditor to obtain this audit evidence.

The following factors have a direct influence on the nature and size of sampling:

- the efficiency of the internal control systems
- the materiality of the population under review
- the volume of the transactions/the method of record keeping
- the relative risk applicable to the population in relation to the objectives of the organisation and the specific activity under review
- the nature of the audit evidence
- a suggestion of irregularities in the population
- compulsory accounting disclosure
- extraordinary items

Statistical and non-statistical sampling

There are two basic types of sampling:

(1) non-statistical sampling (judgemental sampling)
(2) statistical sampling

Statistical sampling is based on scientific principles whereas judgemental sampling is applied purely on the basis of the auditor's judgement. Statistical sampling can be based on either attributes or values.

Statistical sampling for **attributes** includes the following sampling methods:

- estimation sampling for attributes
- acceptance sampling
- discovery sampling

Statistical sampling for **values** includes the following sampling methods:

- estimation sampling for variables (classical variables sampling)

- monetary unit sampling (probability proportional to size sampling)

Sampling terminology

It is essential that you understand the following basic terms or concepts associated with audit sampling.

Population

A population comprises the total number of items from which the sample must be selected. The population is made up of sample units. These units consist of individual elements from which the sample will be drawn, for example documents and entries. The specification for the population should include the internal auditor determining the size of the population. This is an important step because the conclusions which are based on the sample results are applicable only to the population from which the sample is drawn. This means that conclusions based on a sample drawn from, say, transactions for July and December are applicable only to these two months and not to the entire year.

In addition to the population size, attention must be paid to the homogeneity of the population. If the population is not reasonably homogeneous, an impractical sample size will have to be used.

Ensuring the homogeneity of the population often requires dividing it into two or more smaller, homogeneous groups. This is known as **stratification**.

Sample

A sample is an adequate number of sample units selected from a population to ensure that it is representative of the population as a whole – in other words, the sample must more or less reflect the same attributes as the population itself. By studying the attributes of the sample, the auditor can draw a conclusion about the attributes of the population as a whole.

Since sampling is based on randomness, it is essential for sample units to be selected from the population in such a way that each sample unit has an equal chance of being included in the sample.

Audit risk

During the planning phase of the audit, the internal auditor uses his or her professional judgement to determine the level of audit risk applicable. Audit risk includes the risk that

- material errors may occur
- the client's system of internal control will not guarantee the prevention or correc- tion of such errors (control risk)
- any remaining material errors will not be discovered by the auditor (detection risk)

Inherent and control risk are present in any organisation, and the auditor has no control over them.

Detection risk originates as a result of the application of sampling as well as factors other than sampling which the auditor can control.

Non-sampling risk

Non-sampling risk may originate when the auditor employs sampling or other audit procedures, and include, for example, the risk that the auditor may use inappropriate procedures or misinterpret evidence, thereby failing to discover an error.

The aim of the internal auditor should be to reduce non-sampling risk to an acceptable level by means of proper planning, management, supervision and reviewing.

Sampling risk

Sampling risk with regard to both compliance and substantive tests originates as a result of the

possibility that the auditor's conclusion, based on a sample, may differ from his or her conclusion, had the entire population been subjected to the same audit procedure.

Determining the acceptable error rate (tolerable deviation rate)

The acceptable error rate is the total number of errors which the auditor is prepared to accept within a given population (expressed as a percentage of the population). The following factors must be taken into account:

- materiality
- the risk that the non-discovery of an error will have a material influence on the findings of the auditor
- the purpose of the test
- the effectiveness of the system of internal control

Experience gained in the past is equally important and the auditor can even make use of a pilot sample.

The auditor must also take into account the fact that the lower (smaller) the rate at which the acceptable error rate is set, the larger the sample will be, and vice versa. The error rate must be determined realistically and conservatively, otherwise under- sampling or oversampling will result.

Expected error rate (expected population deviation rate)

The expected error rate is the estimated, expected number of errors which the internal auditors estimate will be present (expressed as a percentage of the population). This is based on the outcome of their evaluation of internal control, their previous experience and information from their preliminary investigation which they gathered during discussions with management (e. g. management have informed him or her that five different debtors clerks were employed during the preceding financial year.)

If the internal auditors expect errors to occur, they will normally investigate a larger sample in order to arrive at the conclusion that the population is reasonable in terms of the planned, expected error rate, or that the planned confidence in the relevant control measures has been confirmed. Smaller-sized samples are justifiable if the population is expected to be error free. In determining the expected error rate in the population, the internal auditors will consider the following factors:

- the number of errors identified in previous audits
- changes in the procedures of the audited organisation as well as the evidence available of the evaluation of the system of internal control and the results of analytical procedures

Sample errors

Sample errors are errors which occur in the sample items being investigated and are indicative of the actual error rate which will be compared with the predetermined error rate in order to determine whether an investigation of the sample will suffice. Although this type of error cannot be eliminated, it can indeed be determined.

Two types of sample errors must be distinguished:

(1) Procedure errors. These are errors that occur in the procedures of the system of internal control, for example neglecting to observe authorisation procedures and a lack of control over activities. In a statistical context, this type of error is referred to as an error in respect of a characteristic or attribute. Estimation sampling for attributes is used to estimate the number of procedure errors which occur in a population. By employing these techniques, the auditor is able to determine whether or not a sample unit satisfies a particular attribute.

(2) Substantive or monetary errors. These are errors that may have a material influ- ence on the reasonableness of the findings, for example principle errors, omissions and calculation errors. In a statistical context, this type of error is re- ferred to as an error in respect of a variable. Although there are many causes of monetary errors, they all

have the same result, namely that the amount indicated is greater or smaller than it should be. Estimation sampling for variables is used to determine the magnitude of this type of error.

Non-sample errors

Non-sample errors are errors caused by human factors (e.g. errors made by the internal auditor) and are not subject to measurement. The causal factors are the following:

- failure to clearly define the nature of the audit investigation
- failure to determine a random starting point when compiling a random sample
- failure to make use of a random sample
- failure to recognise an error as a result of which the sample result is not properly evaluated, thus leading to incorrect conclusions

The occurrence of this type of error can never be entirely eliminated, but can be greatly reduced by employing trained personnel to undertake the sampling.

Sampling errors

A sampling error originates solely as a result of the use of sampling and because the sample does not constitute a perfect miniature of the population from which it is drawn. The sampling error indicates to what extent the sample should be regarded as providing a reliable version of the actual attributes and/or value of the population (sample precision). This type of error cannot be eliminated entirely, but its incidence can be reduced by increasing the precision requirement.

Confidence level (100% minus the acceptable risk of assessing control risk too low). This is the confidence (expressed as a percentage) which the auditor has about sample reliability and it is expressed in terms of probability. The confidence level therefore express the level of confidence that the internal auditor places in the result of sampling, for example a 100%, 95% or 90% certainty exists that the amount of stock is worth R300 000.

A 100% certainty about the attributes of a population can be achieved only by means of a 100% investigation of the whole population. Since statistical sampling involves the investigation of only a part of the population, the auditor making use of sampling, can never be 100% certain about the attributes of a population.

The better the internal control system, the greater the confidence that can be placed in the system and, consequently, the confidence level required may be lower. Obviously, the converse is also true.

Precision limits

Since the internal auditor can, with the aid of estimation sampling, only make an estimate of the attributes or value of the population, the result cannot be expressed in absolute terms, especially considering that only a part of the population is being investigated. The estimate is thus expressed within certain limits of precision from, say, the acceptable error rate in respect of a population.

The precision limits constitute the limits within which the result should fall for a population to be acceptable.

The auditor must decide on the precision limits beforehand, and once he or she has determined the purposes of his or her test. The precision limits have a direct influence on the sample size, because the closer the limits are set in relation to one another, the closer and more precise the estimate will be – hence a larger sample size will of necessity be required.

Precision limits are used in the case of the following sampling techniques:

- estimation sampling for attributes
- estimation sampling for values

Determining precision limits will be influenced by the nature of the particular attribute being investigated. If the attribute has a material influence on operational or financial data, the internal auditor will want to make a reasonably reliable estimate and will thus decide on a smaller difference between the highest and lowest precision levels.

Even in the case of estimation sampling for variables, only an estimate is made of the value of the population, with the result that the estimate cannot be expressed as an absolute value, especially if you bear in mind that only a part of the population is investigated.

The precision level is a statistical measure of the maximum acceptable difference (precision internal) between the estimate which is based on the sample and the actual, but unknown, value of the population. (Note that the latter value is not necessarily the value as indicated by the financial records.)

The auditor must decide on the maximum difference between the estimated value and the actual, but unknown, value of the population which he or she will be prepared to accept. The highest and lowest values of the precision interval are the precision limits. If the value according to the operational or financial records falls within the confidence limits, the records are acceptable.

Interaction between the confidence level and the precision limits

Confidence and precision are interrelated in the sense that, when a choice is made in respect of the one, the other must also be stipulated. The bigger the precision limits, the lower the confidence that can be placed in the required result given the same sample size, and vice versa. Consider this point carefully.

The influence of different confidence levels and precision limits on sample size is reflected by the following extract from tables for a population of 10 000 items.

Confidence level		**99%**	**95%**	**90%**
Precision limits	± 1%	1617	1005	730
	± 2%	460	272	193
	± 3%	210	123	87
	± 4%	119	69	49
	± 5%	77	45	32

Precision limits and confidence levels will be determined on the basis of the auditors' judgement, and the following factors will influence this judgement:

- materiality
- the risk that the non-discovery of an error will have a material influence on the operational results or financial statements
- the purpose of the test (audit procedure)
- the effectiveness of the system of internal control

Standard deviation

If all monetary values of the population items are the same, there will be no variability within the population and there will be no problem with determining the value of the population. Normally, however, the values of items in a population do differ. It is not possible to determine the desired sample size of variables without any knowledge of the distribution or variety in the population.

The standard deviation is a measure which indicates the distribution of values in a population around the average value of that population. This average value is usually the arithmetical average. Since the standard deviation is a characteristic of a population, it is not subject to the decision of the auditor, but must be determined or calculated by him or her.

The greater the number of extreme values in a population, the greater the distribution and the standard deviation will be. The magnitude of the standard deviation has a direct influence on the sample size. The greater the distribution, the larger the sample will have to be to ensure that all values are represented in it. The converse is equally true – that is, the smaller the distribution and standard deviation, the smaller the sample will be, because the possibility that all types of attributes will be represented is great.

Stratification

Stratification entails the division of a population into subpopulations. The latter constitute a group of sampling units which have more or less the same attributes. The strata must be identified explicitly so that each sampling unit can belong to a stratum. This procedure reduces the variation (standard deviation) of all the items in the stratum.

Stratification enables the internal auditors to devote their attention to items having a greater rand value. For example, the internal auditor may concentrate on debtors with greater values in order to discover material errors. Stratification should result in a smaller sample size.

Sample selection methods

The basic requirement for a random sample is that each sample unit in the population must have an equal chance of being included in the sample. The different selection methods are all subject to this requirement. The following methods may be applied.

Random number tables

The tables may be read in any direction, but it is essential to decide beforehand how the table will be read and then to abide by this decision throughout the entire process of compiling the sample. Should duplicate numbers occur in the sample, further readings must be taken until a sample is obtained with the required number of items. This method can only be applied if the population is numbered numerically.

The South African Lotto is possibly the best example of random numbers where each number has an equal chance of being selected, and where it is impossible to establish a pattern in the numbers or to forecast the winning numbers with any degree of accuracy.

Systematic sampling

This method entails drawing every "nth" item after using a random starting point. This method can be used effectively if the population is not numbered numerically.

Sampling with the aid of a computer

Random samples can be drawn with the aid of a computer. Computer programs which have been developed for the purpose of drawing samples are generally available. Sample variables (population size, confidence level, precision limits, etc) are fed into the computer, after which the sample is drawn randomly by the computer.

9.3 STATISTICAL SAMPLING TECHNIQUES IN TESTS OF CONTROLS

As indicated previously, statistical sampling for attributes includes the following sampling approaches:

- estimate sampling
- acceptance sampling (referred to as "stop and go" sampling in Reding et al)
- discovery sampling

9.3.1 Estimation sampling for attributes

This sampling approach will be used when the auditor needs to estimate the number of compliance errors in a population, for example how many purchase invoices issued in the past two months have not been approved for payment.

ACTIVITY 9.2

The following activity explains how estimation sampling for attributes is done. Make sure that you follow the reasoning that is used to decide on the method of sampling and how to perform it.

> The clerks working in the wages section of ABC (Pty) Ltd have been specifically instructed to check the normal hours worked, wage rates, overtime worked and the calculations on the wage sheets before any wages may be paid out.
>
> You are assigned to an audit of the wages section and you have to carry out the following audit procedure.
>
> Apply a statistical sampling method to determine the effectiveness of the work performed by the clerks on the wage sheets:
>
> (1) population: 500 wage sheets
> (2) confidence level: 90%
> (3) precision limits: ±4%
> (4) acceptable error rate: 5%

FEEDBACK

Consider the following questions about the audit procedure you have to carry out:

(1) What method would you use? Why?
(2) How many items would you include in your sample?
(3) How would you select the sample items?
(4) How would you evaluate the results to determine whether you can draw a conclusion about the audit procedures you performed on the sample?

(1) What method would you use? Why?

Before you can decide on a specific method you must first clearly understand the purpose of the sample. The audit procedure states clearly that you must not only

determine whether the clerks have made any mistakes, but also how effectively they have been doing their work. You, therefore, wish to determine the number of errors (or the error rate) estimated to occur in the population. The relevant technique to use would be estimation sampling for attributes. Why? Estimation sampling for attributes is used to estimate, for example, the number of compliance errors occurring in a population.

(2) How many items will you include in your sample?

Follow the seven steps below to determine the answer:

Step 1: Decide on the sample unit, which are the items you will be drawing your sam- ple from. In this case, it is the **wage sheets**.

Step 2: Determine the population size (consisting of the sample units): given as **500 wage sheets**.

Step 3: Define the term "error" which will be the attribute you will be looking for when performing the tests: **"A control that is not functioning as intended – that may cause inaccurate recording of hours worked, wage rates, over- time hours and calculations on the work sheet."**

Step 4: Decide on the confidence level, e.g. 90%, 95% or 99%: given as **90%**.

In your prescribed book, Reding et al, the terminology used for this step is determining "the acceptable risk of assessing control risk too low", which is the complement of the confidence level: i. e. if the acceptable risk of assessing control risk too low is 5%, the confidence level is 95%. Read the explanation of this in Reding et al (p 11-7).

Step 5: Decide on the maximum acceptable error rate. That is the maximum number of errors which you are prepared to accept, expressed as a percentage of the population: given as **5%**.

Step 6: Decide on the precision limits – i.e. How sure do you want to be about your sampling result (between 1% and 5%)? Given as **4%**.

Step 7: Determine the sample size by using a formula (not discussed in this module) or referring to a readily available sample size table appropriate for the sam- pling method decided upon, in this case "estimation sampling for attributes". Refer to the following table.

TABLE A

Estimation sampling: attributes

Confidence level: 90% **Error rate: 5%**

Population size	Sample size for precision of		
	±2%	±3%	±4%
200		84	58
300	156	97	64
400	179	106	67
500	196	112	70
600	210	116	71
700	221	119	73

Confidence level: 90% **Error rate: 5%**

Population size	Sample size for precision of		
	±2%	±3%	±4%
800	230	122	74
900	237	124	74
1000	244	125	75

Using table A, for a population size of 500 and precision as ±4%, the sample size should be 70.

You should therefore randomly select **70** wage sheets for testing.

(3) How would you select the sample items?

Randomly, with the aid of either a random number table or a computer program that can determine 70 random numbers for a given population.

For the purpose of this exercise a random number table is used. See the random number table (table A2), which follows.

Note. A random number table could be used in several ways. You can begin your selection anywhere on the table (e.g. in row 10, column 4) and use any three digits in a number, depending on your population size or numbers (e.g. the last or middle three digits). If you want to select pre-numbered documents, say cheques numbered from 1768 to 2267, you will make use of four digits and select numbers falling within that range.

For the purpose of this exercise, start at the top of column 1 in the random number table (table A2) and work downwards. Select the first 70 items that are between 1 and 500, using the first three numbers from the left of the values given in the column. Skip values outside the population and select replacements for any duplicate numbers selected.

The first 21 items selected would then be 104, 223, 241, 421, 375, 289, 094, 103, 071, 150, 023, 010, 070, 486, 326, 293, 024, 296, 007, 053, 005.

Continue until 70 items have been selected and check each of these wage sheets to determine whether they contain any errors with regard to hours worked, wage rates, overtime worked, and so on.

(4) How would you evaluate the results to determine whether you can draw a conclusion about the audit procedures you performed on the sample?

An error found on the wage sheets in the operation of the controls that ensure that the capturing of the normal hours worked, wage rates overtime worked and the calculations on the wage sheets are accurate indicates a breakdown in the control and should be noted as an error.

Say, for this example, you discover five errors.
The actual error rate is 5/70x100 = 7.14%.

Based on this calculation, you have to decide whether or not you can accept the population on the strength of this sample result.

To make this decision, you have to go back to the parameters that were set when you designed your statistical sample. In this example, the following applies:

(1) population: 500 wage sheets
(2) confidence level: 90%
(3) precision limits: ±4%
(4) acceptable error rate: 5%

You have been instructed to use an acceptable error rate of 5% and precision limits of ±4%.

To be acceptable, your actual error rate should therefore fall between (5-4=)1% and (5 +4=) 9%. The actual error rate calculated above is 7.14%. Since it falls within the acceptable error rate margins of 1% to 9%, you can conclude that you are 90% confident that according to the tests performed on wage sheets, the work performed by the wage clerks is effective.

TABLE A2

Random number table

Line	(1)	(2)	(3)	(4)	(5)	(6)
1	10480	15011	01536	02011	81647	91646
2	23682	46573	25595	85393	30995	89198
3	24130	48360	22527	97265	76393	64809
4	42167	93093	06243	61680	07856	16376
5	37570	39975	81837	16656	06121	91782
6	77921	06907	11008	42751	27756	53498
7	99562	72905	56420	69994	98872	31016
8	96301	91977	05463	07972	18876	20922
9	89579	14342	63661	10281	17453	18103
10	85475	36857	53312	53988	53060	59533
11	28918	69578	88231	33376	70997	79936
12	63553	40961	48235	03427	49626	69445
13	09429	93969	52636	92737	88974	33488
14	10365	61129	87529	85689	48237	52267
15	07119	97336	71048	08178	77233	13916
16	15085	12765	51821	51259	77452	16308
17	02368	21382	52401	60268	89368	19885
18	01011	54092	33362	94904	31237	04146
19	52162	53916	46369	58586	23216	14513
20	07056	97628	33787	09998	42698	06691
21	48663	91245	85828	14346	09172	30168
22	54164	56492	22421	74103	47070	25306
23	32639	32363	05597	24200	13363	38005
24	29334	27001	87637	87308	58731	00256
25	02488	33062	28834	07351	19731	92420
26	81525	72295	04839	96423	24878	82651
27	29676	20591	68086	26432	46901	20849

Line	(1)	(2)	(3)	(4)	(5)	(6)
28	00742	57392	39064	66432	84673	40027
29	05366	04213	25669	26422	44407	44048
30	91921	26418	64117	94305	26766	25940
31	00582	04711	87917	77341	42206	35126
32	00725	69884	62797	56170	86324	88072
33	69011	65795	95876	55293	18988	27354
34	25976	57948	29888	88604	67917	48708
35	09763	83473	73577	12908	30883	18317
36	91567	42595	27958	30134	04024	86385
37	17955	56349	90999	49127	20044	59931
38	46503	18584	18845	49618	02304	51038
39	92157	89634	94824	78171	84610	82834
40	14577	62765	35605	82163	39669	47358
41	98427	07523	33362	64270	01638	92477
42	34914	63976	88720	82765	34476	17032
43	70060	28277	39475	46473	23219	53416
44	53976	54914	06990	67245	68350	82948
45	76072	29515	40980	07391	58745	25774
46	90725	52210	83974	29992	65831	38857
47	64364	67412	33339	31926	14883	24413
48	08962	00358	31662	25388	61642	34072
49	95012	68379	93526	70765	10592	04542
50	15664	10493	20492	38891	91132	21999

9.3.2 Acceptance sampling (stop and go sampling)

The purpose of this technique is to ascertain whether there is not more than a certain percentage of errors (or a certain attribute) in a population. This technique indicates whether a population will be accepted or rejected. No opinion can be formed about the total number of errors in the population; all that can be ascertained is that the actual error rate is greater or smaller than the error rate accepted beforehand.

This technique is of more value to the internal auditor than to the external auditor, since the external auditor wants to know what the actual error rate in a population is. They will rather use the previous sampling method – that is, estimation sampling for attributes.

ACTIVITY 9.3

You are auditing payments and need to establish whether all invoices are properly authorised before payment. You have to select the payments – say cheques issued for a certain period – and check that supporting documents have been signed by the person who signed the cheque.

The population size is 1 000 cheques issued.

You have decided on an acceptable error rate of 2%.

You want to be 90% confident of your result.

FEEDBACK

Consider the following questions about the audit procedure you have to carry out:

(1) What method would you use? Why?
(2) How many items would you include in your sample?
(3) How would you select the sample items?
(4) How would you evaluate the results to determine whether you can draw a conclusion about the audit procedures you performed on the sample?

(1) What method would you use? Why?

Before you can decide on a specific method you must first clearly understand the purpose of the sample. The audit procedure states clearly that you must determine whether all payments have been authorised. You will be happy with an error rate of up to 2%, but if the actual error rate reaches above 2% you will stop the testing and conclude that you cannot rely on the control. The relevant technique to use would be Acceptance (stop or go) sampling. Why? Acceptance sampling will help you to determine whether there is more than a 2% error rate (cases of non-compliance) in the population.

(2) How many items will you include in your sample?

Follow the six steps below to determine the answer:

Step 1: Decide on the sample unit, that is the items you will be drawing your sample from. In this case, it is pre-numbered cheques.

Step 2: Determine the population size (consisting of the sample units): given as **1 000 cheques issued**.

Step 3: Define the term "error" which will be the attribute you will be looking for when performing the tests: **"A cheque issued for which no authorisation for payment can be found on the corresponding documents."**

Step 4: Decide on the confidence level, e.g. 90%, 95% or 99%: given as **90%.**

Step 5: Decide on the maximum acceptable error rate. That is the maximum number of errors which you are prepared to accept, expressed as a percentage of the population: given as **2%**.

Step 6: Determine the sample size either by using a formula or by referring to a readily available sample size table appropriate for the sampling method decided upon: in this case "acceptance sampling". Refer to table B, which follows.

- Use a table with the relevant population size (1 000 in this example).
- Scan the "error rate in population" column until you find 2%.
- Scan the 2% column until you find a probability of acceptance which is approximately equal to 100% minus the desired confidence level, in this case 100-90 = 10%. The exact figure of 10% does not appear in the column. You thus need to select the figure which closely approximates 10. Each of the figures in the table represents a different sample size. You must use 11.9% since it represents the smallest sample, namely 100, in which no errors may occur. However, this is not always the case. Refer, for instance, to the "0" in the second column.

(3) How would you select the sample items?

Randomly, with the aid of either a random number table or a computer program that can determine 100 random numbers for a given population.

For the purpose of this exercise a random number table is used. See the random number table already provided (table A2).

For the purpose of this exercise, start at column 3, row 4, in the random number table (table A2) and work sidewards. Select the first 1 000 items that are between 1 and 1 000, using the first four numbers from the left of the values given in the column. Skip values outside the population and select replacements for any duplicate numbers selected.

The first 21 items selected would then be 624, 785, 612, 690, 546, 797, 342, 942, 711, 817, 236, 101, 414, 705, 999, 669, 917, 559, 25, 248, 735.

Continue until 100 items have been selected.

Say the cheques are numbered from 24681 to 25680, cheque number 24681 will be item number 1 and cheque 25680 will be item number 1 000. Item 624 will constitute cheque number 25304. For each of these cheques selected, obtain the supporting documentation and check if it has been signed for approval of payment.

TABLE 9.3

Acceptance sampling *(for random samples only)*

Population size 1 000

Sample size	Acceptance number	When population contains an error rate of				
		0.5%	1%	2%	3%	4%
		the probability of accepting the population is				
100	0	59.0	34.7	11.9	4.0	0
100	1	91.9	73.6	38.9	17.9	0
100	2	99.2	93.1	67.7	40.8	0.1
100	3	99.9+	98.8	86.9	64.8	0.6
100	4	99.9+	99.8	95.8	82.7	1.9
125	0	51.2	26.1	7.3	1.7	0
125	1	88.0	68.9	26.4	9.3	0
125	2	98.4	88.2	53.4	25.4	0
125	3	99.9	97.3	76.7	47.1	0.1
125	4	99.9	99.6	90.7	68.2	0.2
150	0	44.3	19.5	3.7	0.7	0
150	1	83.6	4.4	17.3	4.6	0
150	2	97.4	82.1	40.3	14.7	0
150	3	99.8	95.1	64.8	31.8	0
150	4	99.9+	99.0	83.2	52.3	0
200	0	32.7	10.6	1.1	0.1	0

Sample size	Acceptance number	When population contains an error rate of				
		0.5%	1%	2%	3%	4%
		the probability of accepting the population is				
200	1	73.8	37.6	6.7	1.0	0
200	2	94.3	68.3	20.3	4.2	0
200	3	99.3	88.2	41.0	11.9	0
200	4	99.9+	97.0	62.7	25.1	0
200	5	100.0	99.6	80.4	42.5	0

(4) How would you evaluate the results to determine whether you can draw a conclusion about the audit procedures you performed on the sample?

If the sample contains no errors, it can be accepted with 88.1% (100-11.9) confidence that the population contains 2% or fewer errors. As soon as an error (or more errors than those indicated in column 2 of the table) is found, it can thus be accepted with 88.1% confidence that the population contains more than the acceptable 2% of errors. However, the actual error rate is unknown.

9.3.3 Discovery sampling

This technique is used to show that there is in fact an irregularity, whether in the form of fraud or a disregard for the system of internal control. To achieve the objective, only one irregularity needs to be discovered. However, a higher confidence level is required than is the case with acceptance sampling. Discovery sampling is appropriate only if there is a reasonable chance that there are irregularities in the population.

This method is seldom used in order to obtain a final answer, but normally gives rise to further action. In addition, it is used more by internal than external auditors. The great advantage of the method is that it can provide extremely valuable information using only a small sample. The disadvantage, however, is that acceptable groups may be rejected. Internal auditors, therefore, rather use it as a provisional measure.

ACTIVITY 9.4

You are investigating an abnormal increase in goods returned notes being issued over the past six months. You decide to perform random tests to determine whether customers sign for receipt of the items despatched to them:

Population size: 1 000 delivery notes

Confidence level: 96%

Acceptable error rate: 3%

Attribute to be investigated: that delivery notes are signed by the customer

FEEDBACK

Consider the following questions about the audit procedure you have to carry out:

(1) What method would you use? Why?
(2) How many items would you include in your sample?
(3) How would you select the sample items?
(4) How would you evaluate the results to determine whether you can draw a conclusion about the audit procedures you performed on the sample?

(1) What method would you use? Why?

Before you can decide on a specific method you must first clearly understand the purpose of the sample. You expect that deliveries of goods are not all signed for. You will be happy with an error rate of up to 3%, but if the actual error rate reaches above 3% it will prove your suspicions. The relevant technique to use would be discovery sampling. Why? Discovery sampling will help you prove that there is more than a 3% rate of non-compliance in the population.

(2) How many items will you include in your sample?

Follow these six steps to determine the answer:

Step 1: Decide on the sample unit: i. e. the items you will be drawing your sample from. In this case, it is delivery notes.

Step 2: Determine the population size (consisting of the sample units): given as **1 000 delivery notes**.

Step 3: Define the term "error" which will be the attribute you will be looking for when performing the tests: **"A delivery note not signed by the customer or a missing delivery note."**

Step 4: Decide on the confidence level, e.g. 90%, 95% or 99%: given as **96% (always high in discovery sampling).**

Step 5: Decide on the maximum acceptable error rate. That is the maximum number of errors which you are prepared to accept, expressed as a percentage of the population: given as **3%**.

Step 6: Determine the sample size either by using a formula or by referring to a read- ily available sample size table appropriate for the sampling method decided upon. In this case "discovery sampling". Refer to table C, which follows:

- Use a table with the relevant population size (1 000 in this example).
- Search under the acceptable error rate, namely 3%, until you find a confidence level of 96%; this indicates a sample size of 100.

(3) How would you select the sample items?

Randomly, with the aid of either a random number table or a computer program that can determine 100 random numbers for a given population.

Refer to the previous two exercises to see how this is done.

(4) How would you evaluate the results to determine whether you can draw a conclusion about the audit procedures you performed on the sample?

If no errors are discovered in the sample, it can be accepted with 96% confidence that the population has 3% or fewer errors. As soon as one error is discovered, the technique has achieved its objective and the sample need not be investigated further.

It has thus been shown with 96% confidence that the population contains more than 3% of errors. However, the actual error rate is not known.

TABLE 9.4

Discovery sampling (for random samples only)

Population size 1 000					
Sample size	Where population contains an error rate of				
	1%	2%	3%	4%	5%
	the probability of finding at least one irregularity is				
10	10%	18%	26%	34%	40%
25	23%	40%	54%	64%	73%
50	40%	65%	79%	88%	93%
100	65%	88%	96%	99%	99.6%
150	81%	96%	99%	99.9%	99.9+%
200	89%	99%	99.9%	99.9+%	99.9+%
300	97%	99.9%	99.9+%	99.9+%	99.9+%
400	99%	99.9+%	99.9+%	99.9+%	99.9+%

9.4 STATISTICAL SAMPLING IN TESTS OF MONETARY VALUES

9.4.1 Probability proportional to size sampling (PPS) (also known as monetary unit sampling [MUS] or dollar-unit sampling)

PPS is an extremely simple concept. It is a statistical sampling technique in terms of which each monetary unit (rand/dollar/pound, etc) in an accounting population has an equal chance of being included in a sample. The probability of an item being included in a sample is thus directly linked to that item's monetary value. The definition of a sample unit is therefore changed from a physical unit (invoice, item of stock) to an individual monetary value (R1,00 or $1,00)

ACTIVITY 9.5

It is the policy of the internal audit activity of the organisation where you are employed as a senior internal auditor to apply the monetary unit sampling (MUS) technique as far as possible. You are busy with an investigation of the sales records for the past six months and you have already established the following information for the purposes of applying this technique:

Total value of the population – R7 350 000 Internal

control – reasonable

Confidence level – 90%

Monetary precision – R69 000 (P)

Invoice number	Invoice amount(R)
101	11 100
102	9 500
103	21 000
104	14 600

105	17 200
106	31 200
107	8 300

TABLE A										
Reliability factors (R)	1,0	1,1	1,2	1,3	1,4	1,6	2,0	2,3	3,0	4,6
Confidence levels	63%	66%	69%	72%	75%	80%	86%	90%	95%	99%

FEEDBACK

(1) Explain the concept monetary unit sampling.
(2) Use the above information with the aid of table A to establish the number of sample items you would select for your investigation. For purposes of your calculations you can accept that no errors will be found. Show all your calculations.
(3) Select the first three invoices for the sample. Accept a random starting point of R12 700. Show how you arrived at your answers.

(1) Monetary unit sampling (MUS)

Monetary unit sampling (MUS) is a statistical sampling method in which each rand (monetary value) in an accounting population stands an equal chance of being selected for a sample. The probability of an item being included in the sample is thus directly linked to the monetary value of that item. The definition of a sample unit is therefore changed from a physical unit (invoice, stock item) to an individual rand (R1,00).

(2) Calculation of the number of sample items

Use table A to process the confidence level to a reliability factor: 90% = 2,3 (R)

Calculate the J-factor:

J = Monetary Precision/Reliability Factor = R69 000/2.3 = R30 000

Calculate the sample size:

Sample size = Total value of population / J-factor = R7 350 000 / 30 000

= 245 items

(3) Selection of the first three invoices for the sample

Invoice No	Invoice amount R	Accumulated amount R	Selected	Invoice selected
101	11 100	11 100		
102	9 500	20 600	12 700	102
103	21 000	41 600		
104	14 600	56 200	42 700	104
105	17 200	73 400	72 700	105

9.4.2 Estimation sampling for variables

This sampling method is used to estimate the monetary value of a population, for example turnover for the year or inventory on hand on a specific date. After conducting estimation sampling for variables the auditor will be able to conclude with a certain amount of confidence that a figure presented by management may either be accurate or inaccurate.

Estimation sampling for variables is often used by external auditors as part of substantive testing and is a very interesting form of sampling, but a detailed discussion of this sampling method goes beyond the scope of this module.

TOPIC SUMMARY

This topic discussed the concepts of audit objectives, audit procedures and audit evidence. It also looked at the difference between tests of controls and substantive testing. When conducting tests of controls in business cycles/processes it is impossible to test everything. This topic also discussed sampling methods and techniques whereby auditors can test a portion of the transactions but still be able to substantiate their opinions on the full population.

Now that you have worked through this topic, are you able to

- identify, give advice or criticise the methods and techniques applied in performing tests of controls?
- apply or give advice on the relevant and appropriate sampling techniques for a given situation?
- draw a sample and extrapolate the results of the sample to the population?

TOPIC 5

Developing audit programmes

Contents

INTRODUCTION AND PURPOSE OF THE TOPIC

The next step then is to focus on the design of risk-based audit programmes for the testing of controls in different business cycles.

In this topic you will learn how to develop an audit programme to perform tests of controls on the different business cycles/processes.

A comprehensive audit programme must answer the following questions:

- What kind of procedures should be performed to satisfy the audit objectives?
- How many tests should be performed?
- When should the tests be carried out?
- Should the tests be carried out manually or should computerised tests be performed?

A comprehensive audit programme is the ideal tool for the internal auditor in charge of the specific audit to monitor progress and control the work performed in the audit.

LEARNING OUTCOMES

When you have worked through this topic you should be able to

- anticipate, identify and give advice about risks associated with certain business processes or cycles
- recommend appropriate control objectives, controls, audit objectives and tests of controls for each business process/cycle

Study unit 10

Developing risk-based audit programmes for different business processes/cycles

Contents

Tests of controls form part of the internal auditor's assurance functions. Reding et al explain the internal audit approach to conducting assurance engagements.

STUDY

Study Auditing Notes (Jackson and Stent) chapter 6:

- The audit process(par 1)
    - Prelimenary engagement activities(par 1-5)
    - Planning(par1-6)
    - Responding to assessed risk(par 1-3)
    - Evaluating, concluding and reporting(par 1)

In topic 3 you revised your second level knowledge of the business cycles/processes and should be able to document the systems, identify the risks in each system and identify the controls to manage the risks in each system. It is important to keep in mind that this module focuses on financial controls in business cycles.

The next step in the audit process is to design the audit programme also referred to as the **test plan** or **engagement work programme**.

Standard 2240 – *Engagement Work Program* – states that *internal auditors must develop and document work programmes that achieve the engagement objectives.* Standard 2240. A1 elaborates further on this statement claiming that *work programmes must include the procedures for identifying, analysing, evaluating and documenting information during the engagement. The work programme must be approved prior to its implementation, and any adjustments (must be) approved promptly.*

In topic 4 you learnt what audit objectives, audit procedures and audit evidence are and how different audit tests can be applied to provide the required evidence. You also learnt how sampling can be used to reduce the amount of testing to be done when testing controls.

You should now be prepared to learn how to develop risk-based audit programmes for performing tests of controls on the different business cycles.

10.1 THE REVENUE AND RECEIPTS CYCLE

You have revised your knowledge of the revenue and receipts cycle in section 3.1.1 of topic 3. You will recall that revenue transactions can take many different forms. For the purpose of discussing tests of controls in the revenue receipts cycle, we will focus on credit and cash sales.

STUDY

Study Auditing Notes(Jackson & Stent) chapter 10:

- Auditing the cycle

Two important audit procedures which are discussed in Jackson & Stent under substantive procedures, which may also be used by the internal auditors as part of their assurance audit of the revenue and receipts cycles, are **debtors circularisation** and **confirmation of cash on hand**.

When the auditors plan to perform tests of controls on sales and receipts, they have to consider the assertions for sales and receipts (occurrence, completeness, accuracy, cut-off and classification) and the possible misstatements that can occur if internal control does not operate effectively. The auditors must evaluate the system they are about to audit and decide whether sufficient controls are in place to either prevent, detect or correct possible misstatements or errors. If controls are present and the auditors decide to rely on them, the controls must be tested to evaluate their effectiveness.

Say, for example, there is a control in place where each sales invoice is checked for mathematical accuracy to prevent transactions from being recorded at an incorrect monetary amount. The auditors can then examine the sales invoices for evidence that it was verified for mathematical accuracy; if no errors are found, they have evidence to conclude that the control is operating effectively.

ACTIVITY 10.1

For each of the assertions – occurrence, completeness, accuracy, cut-off and classification – identify

- A possible error that can occur;
- an example of a control activity to prevent, detect or correct each error; and
- describe a test of control for each of the control activities mentioned

FEEDBACK

Assertion	**Occurrence**
Possible error	Goods are despatched to a customer who is a bad credit risk.
Example of a control activity	Proper procedures are in place to authorise credit and despatch of goods.
Test of control	Select a sample of despatch notes and trace them to the originating documents. Examine sales orders for proof of proper credit approval. In case of a computerised system application controls for credit limits can be examined.
Assertion	**Completeness**
Possible error	Goods are despatched but the revenue has not been recorded.
Example of a control activity	Despatch documents are matched to the sales invoices.
Test of control	Select a sample of despatch documents and trace them to their respective sales invoices.

Assertion	**Accuracy**
Possible error	Amounts in the sales journal are not posted correctly to the general journal.
Example of a control activity	Customer statements are sent out monthly and an inde-pendent person is assigned to review complaints.
Test of control	Observe the procedures followed for the mailing out of monthly statements and enquire from staff how complaints are followed up.
Assertion	**Cut-off**
Possible error	Transactions are recorded in the wrong period.
Example of a control activity	Goods are invoiced, on the day of despatch.
Test of control	Select a sample of sales invoices and compare the dates of despatch with the dates of entry in the sales journal.
Assertion	**Classification**
Possible error	Sales of spare parts are classified as sales of complete products.
Example of a control activity	Different codes are assigned to different sales items.
Test of control	Select a sample of entries in the sales journal and trace them back to the sales invoices. Examine the sales invoices for the description of the item, make sure that the correct code was used and that entry in the sales journal is correct. In a computerised system the auditor could test the appli- cation controls to ensure codes are correctly assigned.

ACTIVITY 10.2

For each of the possible errors in cash receipts transactions that follow

- indicate the assertion implicated
- suggest a control activity to detect any such error that may have occurred
- give an example of a test of control that may be used to assess the effectiveness of the control activity you have suggested

Possible errors:

1. Cash receipts were posted to the wrong customer's account.
2. Cash receipts have not been recorded.
3. Cash receipts have been recorded in the wrong period.
4. Cash receipts have been recorded, but have not been received or deposited.

FEEDBACK

1. *Posted to the wrong customer's account.*	**Assertion**	**Classification**
	Detective control	Reconciliation, on a daily basis, of the remittance report with postings to the cash receipts journal and accounts receivable subsidiary ledger.
	Test of control	Verify whether reconciliations are performed every day and test the accuracy of some of the reconciliations performed.
2. *Not recorded.*	**Assertion**	**Completeness**
	Detective control	Daily cash receipts are reconciled with postings to accounts receivable ledger.
	Test of control	Verify whether reconciliations are performed every day and test the accuracy of some of the reconciliations performed.
3. *Recorded in the wrong period.*	**Assertion**	**Cut-off**
	Detective control	Cash receipts at, before and after a certain date are reconciled to ensure recording in the correct period.
	Test of control	Review and test the reconciliation.
4. *Recorded, but have not been received or deposited.*	**Assertion**	**Occurrence**
	Preventive control	Regular bank reconciliations are performed and independently reviewed.
	Test of control	Review bank reconciliations to check for proof of independent review.

10.2 THE ACQUISITIONS AND PAYMENTS CYCLE

The acquisitions and payments cycle (also referred to as the purchases payments cycle) deals with two major activities which according to Jackson & Stent are linked but are also quite distinct:

- the ordering and receiving of goods (or services) from suppliers
- the payment of amounts due for the goods ordered and received

The acquisition phase of the cycle attempts to ensure that the organisation orders and receives only those goods which it requires and that the goods are of a suitable quality and price. The second phase of the cycle attempts to ensure that only goods that have been validly ordered and received are paid for and that payment is authorised, accurate and timely.

You revised your knowledge of the acquisitions and payment cycle in section 3.1.2 of topic 3. In this study unit, performing tests of controls on acquisitions and payments is discussed.

STUDY

Study Jackson & Stent, chapter 11:

- Auditing the cycle

ACTIVITY 10.3

Identify the financial assertions in the acquisition and payments cycle.

FEEDBACK

Purchases (acquisitions)	**Payments**
Occurrence	Occurrence
Accuracy	Accuracy
Cut-off	Cut-off
Classification	Classification
Completeness	Completeness

ACTIVITY 10.4

For each of the risks with regard to the ordering of goods, listed by Jackson & Stent on page 11/9, describe a control that will limit the risk and describe a test of control to assess the effectiveness of the control.

FEEDBACK

***Risk:** Ordering of incorrect/unnecessary goods, resulting in liquidity problems and wastage.*	
Control	**Test of control**
Preset re-order levels and re-order quantities are used as the basis for preparing requisitions. No order is placed without an authorised requisition.	Enquire about the basis on which orders are placed for inventory items and count some of the inventory items recently ordered to determine whether the re-order quantity has been reached. Also verify whether the number of items ordered agree with the preset re-order quantities.
***Risk:** Ordering unauthorised goods resulting in losses to the company through fraud.*	
Control	**Test of control**
No order is placed without receiving an authorised requisition. Senior buyers d review the orders for suitability of supplier, reasonableness of price and quantity, and nature of goods being ordered.	Select a sample of pre-numbered orders and trace them to an authorised requisition. Check for the signature of a senior buyer to substantiate that the reasonableness of the requisition was thoroughly reviewed.

Risk: *Requisitions not acted upon or orders not placed timeously or at all.*	
Control	**Test of control**
Requisitions are properly filed and frequently scrutinised for cross-referencing to an order.	Observe whether requisitions are properly filed and obtain the reasons for any requisitions not cross-referenced to orders.
Risk: *Obtaining inferior quality goods.*	
Control	**Test of control**
An approved supplier list is used for purchasing. Suppliers are approved based on the quality of their products, prices and reliability.	Obtain an approved suppliers list and scrutinise some of the orders placed to verify that approved suppliers are being used.
Risk: *Paying unnecessarily high prices for goods.*	
Control	**Test of control**
Quotes are obtained from a number of suppliers before purchasing, if purchas- ing is not done from an approved suppliers list.	Scrutinise the purchases journal for suppliers not on the approved suppliers list. Trace a selection of higher value purchases to ensure that quotes have been obtained from a number of suppliers before the purchase was made.
Risk: *Orders placed with suppliers not filled or not timeously filled.*	
Control	**Test of control**
The pending file of purchase order forms is reviewed for orders which are long outstanding.	Enquire about any long outstanding or- ders in the purchases pending file.
Risk: *Order forms misused, e.g. for placing orders for private purchases.*	
Control	**Test of control**
Blank order forms are subject to sound stationery controls.	Obtain proof of control over blank order forms, by checking the stationery inventory and making sure that account can be given of all order forms issued from stationery and which have not yet been used in the ordering process.

ACTIVITY 10.5

The following tests of controls are performed on cheque payments:

1. Verify that all cheques have been signed by two authorised signatories.
2. Observe the handling of signed cheques to determine whether they go back to the signatory or preparer or whether they are mailed by an independent employee.
3. Check whether all cheques are recorded in numerical order in the cash purchases journal.
4. Confirm control over cheque books issued and ensure that only one cheque book is in issue at the time that the test is performed.

5. Review paid cheques received from the bank for suspicious endorsements or changes on cheques and trace any such changes back to proper source documents.

REQUIRED:

For each of the tests of controls listed above, identify the risk associated with each of the controls being tested.

FEEDBACK

Risk associated with the controls being tested:

unauthorised payments / fraudulent payments

falsification of cheques / fictitious payments

expenses not recorded / cheques may have been suspected to hide invalid / fraudulent payments

unauthorised payments / fraudulent payments

invalid payments / fraudulent payments

10.3 THE INVENTORY AND PRODUCTION CYCLE

You refreshed your knowledge of the activities, functions and documents in the inventory and production business cycle in section 3.1.3 of topic 3. This included a review of the risks relating to this cycle and the internal controls to mitigate those risks. Jackson & Stent (2012:12/3) explains the inventory and production cycle as an internal cycle, forming a link between receiving (part of the acquisitions payables cycle) and despatch (part of the revenue and receipts cycle). This study unit discusses how tests of controls should be performed in this cycle.

STUDY

Study Jackson & Stent, chapter 13:

- Auditing the cycle

ACTIVITY 10.6

Why is attending a year-end inventory count regarded to be a test of control as well as a substantive procedure?

FEEDBACK

The auditor will be gathering evidence about the effectiveness of the control procedures put in place to establish the quantity of inventory actually held (tests of controls). At the same time the auditor will be gathering substantive evidence about

- the existence of the quantity of inventory recorded, by testing from the records to the physical inventory

- the condition of inventory, by inspecting and looking for damaged/obsolete items as well as evidence of slow moving inventory
- the completeness of inventory, by testing from the physical inventory to the records

ACTIVITY 10.7

For each of the control activities for the controlling of the movement of goods, components and finished goods, listed in Jackson & Stent on page 12/6, describe tests of controls to assess their effectiveness.

FEEDBACK

Control activity	Tests of control
No movement of inventory without an authorised document	Enquire about and test the procedures for the transfer of inventory. Select a number of movements in inventory from the perpetual inventory records and trace to supportive documents (picking slip or requisition).
No movement of inventory without it being recorded	Select a number of signed off material issue notes and trace the details back to the perpetual inventory records. Confirm correct item and quantities.
Transfers of inventory between sections which should be acknowledged by both sections	Select a sample of movements of inventory between locations and obtain the supporting documents. Confirm that the warehouse personnel and the section receiving the material (i.e. production clerks) have signed the material issue note after checking the quality and description of goods being transferred.
Documents sequenced and filed numerically	Confirm that requisition notes/picking slips/delivery notes are used in numerical sequence and filed numerically.
Sequence of documents checked and missing documents which should be investigated	Page through filed material issue notes and enquire about any missing numbers in the documents filed. Assess whether proper control is executed over the documentation related to issuing of materials.

10.4 THE PAYROLL AND PERSONNEL CYCLE

Two main types of transactions are processed through the payroll and personnel cycle:

- payment to employees for services rendered (salaries and wages)
- accrual and payment of payroll-related liabilities (employee deductions such as taxes pension fund and medical aid

You refreshed your knowledge of this cycle when studying section 3.1.4 in topic 3. Performing tests of controls for this cycle is discussed next.

STUDY

Study Auditing Notes(Jackson & Stent), chapter 13:

- Auditing the cycle

ACTIVITY 10.8

Formulate tests of controls for each of the following internal control measures applying to wages, salaries and wage disbursements:

(1) Wages: The responsible person should authorise any changes in the rate in writing, per employee, and then place the amendment on the employee's permanent personnel file.

(2) Salaries: A person who has not been involved in drawing up the payroll should check the arithmetical accuracy of the payroll.

(3) Wage payouts: Each employee should be properly identified by checking his or her identity number or identity card before the wage in question is paid out.

FEEDBACK

Internal control measures	Tests of controls
(1) Wages – authorisation of rate changes	Scrutinise each employee's permanent personnel file and make certain that the rates of pay and any changes in the rates of pay have been authorised in writing and have been filed.
(2) Salaries – checking arithmetical accuracy of the payroll	Inspect whether the signature of the responsible person who checked the arithmetical accuracy of the payroll appears on the payroll.
(3) Wage payouts – identification of employees	Observe whether all the employees are properly identified when wages are disbursed through scru- tiny of their identity documents or identity cards before their wages are handed over.

Source: Puttick & Van Esch (2007: 781-786) update

10.5 THE FINANCE AND INVESTMENT CYCLE

Investing and financing activities consist of transactions that relate to the acquisition of the non-current (fixed) assets which are required for managing the activities of the enterprise. The financing activities include funds obtained from borrowing, finance leases and operating leases. The audit of financing activities includes the audit of borrowings, interest-bearing borrowings (secured and unsecured) and instalment sale agreements as sources of financing. In a normal commercial enterprise, its financing activities include funding of its business operations and capital expenditure. Make sure that you understand the nature of the finance and investment cycle as revised in section 3.1.5 of topic 3.

10.5.1 Financing activities (borrowings)

Long-term borrowings are normally incurred in order to finance non-current assets or operating capital. Long-term borrowings are classified as obligations incurred for periods of longer than a year. If the obligations are repayable within a year, they would not be classified as long-term borrowings but as current liabilities, and they would be disclosed as such in the balance sheet.

The portion of the long-term borrowings that are repayable within a year would likewise be included as part of the operating liabilities of an enterprise.

Jackson & Stent discuss the audit objectives for borrowings from an external auditing perspective. The audit objectives are formulated on the basis of the assertions applicable to balance sheet balances. Most of the audit will consist of substantive testing and is normally conducted by the external auditors having to express an opinion on the fairness of the financial statements.

STUDY

Study Auditing Notes(Jackson & Stent) chapter 14

- Auditing the cycle

Financing activities should, however, also be controlled. The incurring of interest- bearing borrowings is usually a once-off transaction (also referred to as non-routine transactions) for the purchase of specific property, plant or equipment or the mortgaging of fixed property to obtain funds for a specific purpose. Since these are not recurring transactions, the internal controls for the control of interest-bearing borrowings centre mainly on controls to ensure that the transactions have been completely and accurately accounted for in the accounting records. It is necessary to ensure that the relevant documents are properly signed and that the client has a copy of the documents in question. Control and supervision are necessary to ensure that the repayment conditions are strictly complied with and that any possible insurance obligations in terms of a debt agreement are fulfilled. Tests of controls will be conducted to ensure that these controls are functioning as intended.

ACTIVITY 10.9

Describe suitable tests of controls to provide assurance that the internal controls that could be introduced to ensure that a mortgage loan incurred to purchase fixed property has been duly authorised and fully and accurately accounted for in the accounting records.

FEEDBACK

Internal controls that could be introduced	Tests of controls
1. The effecting of the mortgage bond should be authorised at a general meeting.	1.1 Ask the CFO or responsible official/ manager whether the mortgage bond has been authorised at a general meeting.
	1.2 Obtain minutes of that meeting provid- ing proof of such authorisation for the amount of the mortgage indicated in the contract.
2. The directors should obtain power of attorney at the meeting to sign the loan contract on be- half of the company. This power	2.1 Obtain a copy of the contract and check whether the signatories on the contract are those of the persons au- thorised by the minutes of the general meeting to have power of attorney.

Internal controls that could be introduced	Tests of controls
of attorney should be recorded in the minutes.	
3. A copy of the registered mortgage deed should be filed in the loan agreements file and recorded in the register of loans and mortgages.	3.1 Obtain the copy of the mortgage deed from the loan agreements file and ensure that the copy was made from the final, signed document.
	3.2 Verify that the mortgage was correctly recorded in the register of loans and mortgages at the correct amount and date.
4. An independent person should compare the accounting record of the transaction with the mortgage deed for accuracy. The independent person should also check whether the contract has been signed by the authorised agents.	4.1 Inquire whether the accuracy of the mortgage deed has been checked by a responsible person.
	4.2 Check the mortgage deed for accuracy and alignment with the authorisation obtained from the general meeting. Also check the deed for validity in terms of signatories, that changes made on the deed have been signed for, etc.

10.5.2 Investment activities (capital expenditure)

Jackson & Stent includes the following main categories of capital expenditure in their discussions of this topic:

- property, plant and equipment
- investments in shares
- long-term loans made by the organisation
- intangible assets

STUDY

Study Auditing Notes(Jackson & Stent) chapter 14:

- Auditing the cycle

When reading the prescribed section about the specific kinds of capital expenditure, pay particular attention to the registration requirements that have to be complied with and the supporting documentation for the particular kinds of assets.

Capital expenditure transactions, such as fixed asset acquisitions do not usually occur every day and are considered to be non-routine transactions. The size of the transactions is usually significant (large amounts) and these transactions are frequently subject to legal and regulatory requirements. Because of this, transactions in this cycle are not subject to the routine everyday controls relating to transactions. Internal controls over non-routine transactions such as finance and investment transactions are still based on the five components of internal control as explained in topic 3 (control environment, risk assessment, information system, control activities and monitoring of controls), but compensating controls would be implemented.

The major risks for capital expenditure with reference to internal control objectives are explained in section 2.3 in Jackson & Stent (p 14/2). The main risks explained here are associated with the finance and investment cycle as a whole, but take note that these risks are also specifically applicable to capital expenditure.

The extent of internal controls introduced for fixed assets depends on the value and number of the fixed assets owned by a particular organisation. The following is a brief summary of the activities/actions that are normally associated with the purchase and continuous use of non-current assets (fixed):

- Appropriate authorisation should be supplied by management for the purchase of non-current assets and the form of financing that will be used (cash payment, loan, instalment sales agreement, etc).
- Quotations are obtained from approved suppliers and a choice is exercised as to where the asset will be obtained from.
- Financing is applied for where appropriate.
- If right of ownership of the non-current asset is subject to legal registration requirements, the assets are registered in the owner's name.
- The non-current asset purchased is received and the particulars are agreed with the information on the supporting documentation.
- The purchase of the non-current asset is recorded in the accounting records in accordance with the information on the supporting documentation: non-current assets (Dt) and bank loan or other form of financing (CR).
- Postings to the ledger are carried out according to the grouping of assets on the ba- sis of the main categories of non-current assets.
- The particulars of the purchased non-current assets are recorded under the appropriate headings in the non-current assets registers.
- Insurance is taken out on the non-current assets in order to reduce the risk of dam- age and loss.
- Expenses for maintenance and repairs are incurred in order to keep non-current assets in good working order.
- Depreciation on non-current assets is written off annually to make provision for the decline in the value of the assets.
- Regular physical inspections of assets are undertaken by authorised persons, and the particulars of the physical asset are compared with the non-current asset regis- ters and the relevant ledger accounts.
- The sale or write-off of a non-current asset should be authorised by management and the appropriate entries should be made in the accounting records and the non-current asset registers.
- Non-current assets are disclosed in the financial statements at cost price less accumulated depreciation, after the amounts and the particulars have been agreed with the non-current asset register and ledger accounts.

ACTIVITY 10.10

Design appropriate tests of controls for the first five control activities listed in the summary of control activities normally associated with non-current asset purchases, listed above.

FEEDBACK

Appropriate authorisation should be supplied by management for the purchase of non-current assets and the form of financing that will be used (cash payment, loan, instalment sales agreement, etc.)

- Select new entries in the fixed asset register for the current year and scrutinise the documents supporting the acquisition for proof, either by signatures, signed mi- nutes of meetings, etc. that the purchase was authorised and that any financing used was authorised.

Quotations are obtained from approved suppliers and a choice is exercised as to where the asset will be obtained from.

- Scrutinise the documentation supporting selected acquisitions and confirm that the correct number of quotations have been obtained, that the quotations was ob- tained from approved suppliers and that the choice of supplier that was made is substantiated.

Financing is applied for where appropriate.

- For acquisitions that have been financed, consider the motivations made for the financing of the acquisition and consider the reasonableness of the decision to acquire the item(s) and to finance the purchase.

If right of ownership of the non-current asset is subject to legal registration requirements, the assets are registered in the owner's name.

- For all vehicles purchased, obtain the original registration documentation and for property purchased, obtain the deed of transfer to ensure ownership. Where proof cannot be found, consider the correctness of the entry under non-current assets.

The non-current asset purchased is received and the particulars are agreed with the information on the supporting documentation.

- Select items added to the fixed asset register in the current year and physically inspect the item to ensure its existence.

TOPIC SUMMARY

This topic discussed the development of audit programmes. First of all the stage when audit programmes are developed were brought into context with a review of the steps in the audit process before audit procedures are developed. The next discussion dealt with the internal audit approach to the development of audit tests discussed in Reding et al, chapter 13. Finally the development of audit procedures were discussed with a look at the different tests that could be performed for the different business cycles as described in Jackson & Stent.

Now that you have worked through this topic, are you able to

- anticipate, identify and give advice on risks associated with certain business processes or cycles?
- recommend appropriate control objectives, controls, audit objectives and tests of controls for each business process/cycle?

TOPIC 6

Substantiating audit findings

INTRODUCTION AND PURPOSE OF THE TOPIC

Substantiating audit findings takes place in the field-work phase of an audit. This is where the steps, as set out in the internal audit programme, are executed by the internal auditors. At this stage, the internal auditors must continuously evaluate whether the audit procedures required by the audit programme will in fact lead to the achievement of the stated audit objectives for the specific business process under consideration.

The field-work phase has been defined by Lawrence B Sawyer as a *systematic assurance process of (1) objectively gathering evidence about an entity's operations, (2) evaluating it, to find out whether those operations meet acceptable standards and achieve established objectives, and then (3) providing information for management decisions.*

While conducting this phase the internal auditor should also evaluate the quality of the audit evidence gathered (discussed in study unit 4.1). All weaknesses and risks discovered during the field work must be noted even if they have no direct link to the audit being performed. The internal auditors must discuss the conclusions drawn as well as all the weaknesses discovered during the audit with relevant staff members to ensure that they understand and agree with the result. If the auditee contests the result, their reasons should be taken into consideration before the audit report is prepared. The aspects of reporting are discussed in topic 7.

LEARNING OUTCOMES

When you have worked through this topic you should be able to

- criticise and give advice about the adequacy, suitability, completeness, relevance and documentation of audit evidence accumulated while performing audit testing

Study unit 11

Accumulating and documenting audit evidence

Contents

11.1 ACCUMULATING AUDIT EVIDENCE

Before you can decide on an appropriate strategy to follow during the field-work phase, you need to first fully understand the process and purpose of field work. During this stage of accumulating audit evidence to substantiate audit findings, it is often necessary for the internal auditor to develop a set of criteria or standards to use to measure the successful attainment of the established goals or objectives of the auditee during the audit of a specific area. These criteria or standards normally define the expectations around "what should be" and must be agreed upon with the auditee before they can be used to measure "what is".

When performing tests of controls, the internal auditor will gather information about the cycle and will confirm with management how the system is working and which controls are in place to ensure that the assertions for each cycle are met ("what should be"). The auditor will then perform audit testing to establish whether or not these controls are in place and working as intended ("what is").

Another method that can be used to determine "what should be" is benchmarking. To properly benchmark the auditee against industry or other standards, the internal auditor must be sure that the information he or she uses as the benchmark is accurate and reliable. Benchmarking is commonly used in tests of controls for business cycles. As you have noted while studying this module so far, strict guidelines exist for accounting systems and financial statements. What applies to one organisation's controls over cash sales is likely to apply to another similar organisation. Auditors will compare the systems of their organisation against the norm and form an opinion on the adequacy of the controls in the organisation.

The definition of internal auditing requires the internal auditor to use "a systematic disciplined approach to evaluate and improve …" (IIA 2009). Thus the use of measurement or comparison with standards or benchmarks is but the first phase of field work; the next phase is to evaluate the findings or results of the measurement or comparison, and to make a professional judgement based on the audit evidence. How to make a professional judgement based on the audit evidence will be dealt with in detail later on in this study unit.

11.1.1 Applying the audit techniques

The various audit techniques such as observing, questioning and so forth were initially described in study unit 4.1 and discussed in more detail in topic 6, for each of the business cycles.

STUDY

Study Auditing Notes (Jackson & Stent) chapter 5:

- Audit evidencethe engagement

SELF-ASSESSMENT QUESTIONS

For each of the following questions, indicate the alternative that represents the correct answer to the question.

1. Which of the following procedures would provide the best evidence of the effectiveness of a credit-granting function?

A. Observe the credit-granting process.
B. Review the trend in receivables write-offs.
C. Ask the credit managemer about the effectiveness of the function.
D. Check for evidence of credit approval on a sample of customer orders.

2. An internal auditor has set an audit objective of determining whether all cash receipts are deposited intact daily. To achieve this objective, the internal auditor interviewed the supervisor, who assured him that all cash receipts are deposited as soon as is reasonably possible. The assurance of the supervisor can be used as evidence that is...

A. sufficient but not reliable or relevant.
B. sufficient, reliable and relevant.
C. not sufficient, reliable or relevant.
D. relevant but not sufficient or reliable.

3. The IIA Standards define relevant evidence as ...

A. information that supports engagement observations and recommendations and is consistent with the objectives for the engagement.
B. information that helps the organisation meet its goals.
C. the best attainable through the use of appropriate audit techniques.
D. factual, adequate and convincing.

FEEDBACK

1. B

The purpose of the credit granting function is to minimise write-offs while at the same time accepting sales likely to result in collection. Alternative B is correct since reviewing the trend in write-offs will provide some insight concerning the minimisation of write- offs.

Alternative A is incorrect as observing will only provide evidence on whether the credit personnel are following the procedures while being observed.

Alternative C is incorrect as responses from the credit manager will lack objectivity.

Alternative D is incorrect as the credit limits may be set too high or not properly revised every six months. The existence of approval will not detect these problems.

2. D

Standard 2310 – *Identifying information* states the following: "Internal auditors must identify sufficient, reliable, relevant, and useful information to achieve the engage- ment's objective." Sufficient information is factual, adequate and convincing so that a prudent, informed person would reach the same conclusions as the auditor. Reliable information is the best attainable information through the use of appropriate engagement techniques. Relevant information supports engagement observations and recommendations and is consistent with the objectives for the engagement. Useful information helps the organisation meet its goals.

Alternative D is therefore correct as the information given by the supervisor through the interview is only relevant.

3. B

Alternative B is correct because that is the definition of relevant information as per the standards. Alternatives A, B and C are incorrect as they respectively represent the definitions for useful, reliable and sufficient evidence.

11.2 DOCUMENTING AUDIT EVIDENCE

It is a professional requirement that internal auditors should work in a methodical manner. Just as auditees are expected to produce supporting documentation, internal auditors are expected to keep written records of their procedures and findings. Internal auditors cannot rely on memory.

Auditors should keep a comprehensive record of all the work performed during the audit process. They should continuously collect working papers prepared either by themselves or by their assistants with reference to the audit engagement. This includes documents, notes, correspond- ence, calculations, appendices and so on. They should carefully document their work to ensure that they will be able to support and defend their findings when necessary. Although the technical appearance of working papers will be determined by the preferences of each organisation, the fundamental elements which will guarantee their effectiveness and efficiency must be included.

Audit working papers

- provide the basis for audit findings and conclusions
- serve as the connecting link between the internal audit report and the organisation's records and data
- provide the audit manager with a basis for review of the field work of audit team members
- provide guidance for follow-up or subsequent internal audits

Revise the following standards and Implementation guidance covered in Topic 1:

Standards

Identifying information: Standard 2310

Docmenting information: Standards 2330

Implementation Standards

Documenting information:

Control of engagement records

Granting access to engagement records

Retention of records

ACTIVITY 3.1

Do multiple choice questions 1.1 to 1.17 of Assignment 2, tutorial letter 101.

FEEDBACK

Feedback will be provided on these questions after the assignment 1 due date.

Discuss your solutions with fellow students on myUnisa, Discussion Forum.

If you have the necessary knowledge and understanding of the content and presentation of working papers, you should have no trouble compiling working papers on tests of controls.

Remember that one of the most fundamental functions of working papers is that they must serve as an effective and efficient basis for compiling the audit report. The working papers must support the whole audit process from planning the performance of the engagement, the evaluation of the engagement evidence, the reporting on the engagement and finally the follow-up on activities reported on.

Noting, analysing, evaluating and summarising information during the audit process are necessary to facilitate the whole process of reporting. The ideal situation is for the detail to be summarised as you go along until the particulars reflected in the audit finding can be read directly from the working papers.

TOPIC SUMMARY

Now that you have worked through this topic, are you able to

- criticise and give advice about the adequacy, suitability, completeness, relevance and documentation of audit evidence accumulated while performing audit testing?

PART D

Audit findings and recommendations

Contents

TOPIC 7

Developing audit findings and recommendations

Contents

INTRODUCTION AND PURPOSE OF THE TOPIC

The effectiveness with which information is collected during the audit process obviously constitutes the basis for successful reporting. The following steps describe the actions of the internal auditor should follow when reporting on an audit engagement:

Step 1: Do meaningful analysis, interpretation and classification of the information collected.

Step 2: Process the audit findings.

Step 3: Discuss the findings with the auditee.

Step 4: Draw up the draft report.

Step 4: Get final approval of the audit report.

In this topic steps 1 to 3 of the reporting process are discussed as they apply to tests of controls.

LEARNING OUTCOMES

When you have worked through this topic you should be able to

- make valid, suitable and practical recommendations to overcome weaknesses and rectify shortcomings identified in business cycles/processes
- formulate and document an adequate and complete audit finding
- criticise and correct inadequate or incomplete audit findings

Study unit 12

Identifying weaknesses and recommending corrective actions

Before the internal auditor can start to draft a report on the audit, the working papers for the specific audit engagement must be reviewed and audit findings must be developed for all the conditions found where improvements can be made. The identification of these conditions is critical to help the internal auditor add value and improve the operations of the activity being audited and, through that activity, to add value to the organisation as a whole.

Once you have identified and compiled the different audit findings applicable to the audit, you need to discuss them with the relevant staff members of the auditee. This will enable you to determine whether they agree with your finding, given the factual support offered by the audit procedures you performed and whether they agree with the corrective action you recommended. Staff members are in the ideal position to identify better corrective actions or to highlight the possibility that the situation your procedures identify could be isolated with little impact.

You should always consider the input of operational staff and management on your findings, but remember to remain objective. To remain objective, "auditors must make a balanced assessment of all the relevant circumstances and must not be unduly influenced by their own interests or by others in forming judgements" (Principle 3 in the Code of Ethics).

STUDY

Study in the study gudie for AUI2601, topic 7, phase 4: Audit reporting and Follow up.

Study unit 13

Drafting audit findings

ACTIVITY 13.1

Using the information you have just studied in study unit 7.1 above, list the key factors on which you require information in order to develop an audit finding.

FEEDBACK

Criteria:	To identify the criteria applicable in a specific situation you need to include the following two elements: ● the goals, objectives and operating standards that represent what the audited operation needs to accomplish ● the quality of the accomplishment (This information should have been identified in the planning phase of the engagement.)
Condition:	This involves the facts as determined by the audit procedures performed by the internal auditor.
Cause:	The underlying cause explains why the condition deviates from the criteria. (Identifying the correct underlying cause requires experience on the part of the internal auditor, and here the input of the senior internal auditor on the engagement or the CAE is invaluable.)
Effect:	The effect must clearly indicate the impact of the deviation from the established criteria. If there is no possible impact it will not be necessary to implement corrective measures, and the management of the organisation can revisit the necessity of the initial criteria to establish whether they are still relevant.
Recommendation:	A corrective course of action that could help to resolve the prob- lem identified should be recommended for management's consideration.

ACTIVITY 13.2

Now that you understand the requirements applicable to audit findings, work through the following scenario to apply your understanding:

> You are the internal auditor responsible for the audit of inventory. The audit of the inventory function is currently in process and the field work will be completed within the next month. During your review of the update process of the inventory records at the supply department you find that they only update the records when there is idle time, or alternatively, once a month.
>
> The policies and procedures require them to maintain perpetual inventory re- cords as the ordering process is automated. You estimate that the actual investment in unneeded material to the company because of this breach of the stated policies and procedures is approximately R60 000 per month, nearly 10% of the monthly purchases. You also note a 47% increase in out-of-stock situations.

REQUIRED:

Based on the information provided, draft a complete audit finding to include in the report to responsible management.

FEEDBACK

Criteria: Perpetual inventory records are required: inventory records should therefore be updated on a continuous basis.

Condition: Inventory records are updated on a haphazard basis – when there is time or once a month.

Cause: This is due to the fact that the staff have too many responsibil- ities and do not find the time to update the records.

Effect: The investment in unneeded material, due to the inaccurate stock figures, is estimated as R60 000 per month (±10% of pur- chases). Additionally there is also a 47% increase in out of stock situations. The monetary effect of this has not been determined.

Recommendation: Hire an additional staff member to take on the responsibility of updating stock records as per the perpetual inventory system.

ACTIVITY 3.1

Do multiple choice questions 1.18 to 1.20 of Assignment 2, tutorial letter 101.

FEEDBACK

Feedback will be provided on these questions after the assignment 1 due date.

Discuss your solutions with fellow students on myUnisa, Discussion Forum.

TOPIC SUMMARY

Now that you have worked through this topic, are you able to

- make valid, suitable and practical recommendations to overcome weaknesses and rectify shortcomings identified in business cycles/processes?
- formulate and document an adequate and complete audit finding?
- criticise and correct inadequate or incomplete audit findings?