

**THE EXPLORATION OF APPRAISING INTERNAL CONTROLS TO DETECT
PROCUREMENT FRAUD DURING THE TENDER STAGE AT MINES**

by

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Declaration

Declaration I, Jan Willem Nicolaas Venter, student number 4183117-9, hereby declare that this dissertation, "Appraising internal controls to detect procurement fraud during the tender stage at mines," is submitted in accordance with the requirements for the Magister Technologiae degree at UNISA, is my own original work and has not previously been submitted to any other institution of higher learning. All sources cited or quoted in this research paper are indicated and acknowledged with a comprehensive list of references.



Jan Willem Nicolaas Venter

29 February 2016

Dedication

I dedicate this research to my late father, Detective Warrant Officer Leon (Bees) Venter and my late grandfather, Detective Sergeant Jan Venter. It is due to their positive influence, the manner in which they conducted themselves and exemplary guidance that I developed a philosophical and devoted approach to the investigation profession.

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Abstract

Procurement fraud is an enormous problem and the South African news is perforated with reports of this illicit act.

Procurement fraud occurs in all the phases of the procurement cycle, but this illicit act is mostly committed during the tender phase. Business does not see procurement fraud as a crime and therefor this crime is committed due to non-existent internal controls and processes to assess the adequacy of these controls. The purpose of the research was to highlight that procurement fraud occurs when internal controls are being bypassed or if an entity has an ineffective internal control system. The researcher studied the appraising of internal controls to understand the role it plays in detecting, preventing and investigating procurement fraud, specifically during the tender phase. The research design utilised was a qualitative research approach and an empirical design plan or strategy, to obtain the information. The researcher opted for this design to obtain information from literature and information from individuals in appraising internal controls. This ensured a comprehensive data gathering process.

The goal of this research was to provide practical recommendations to assist investigators in private and public sectors with investigations into procurement fraud during a tender.

Key Terms:

Forensic investigation, crime investigation, commercial crime, internal controls, corruption, procurement fraud, red flags and collusion.

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THE EXPLORATION OF APPRAISING INTERNAL CONTROLS TO DETECT
PROCUREMENT FRAUD DURING THE TENDER STAGE AT MINES

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List of abbreviations

AGA	AngloGold Ashanti
BEE	Black Economic Empowerment
B-Tech	Bachelor Technologiae
CEO	Chief Executive Officer
CFO	Chief Financial Officer
COSO	Committee of Sponsoring Organisations
Et al	And others
FCPA	Foreign Corrupt Practices Act of 1977
GAO	General Accounting Office
GIA	Group Internal Audit
NITT	National Investigation Task Team
Pty	Propriety limited company
PwC	PricewaterhouseCooper
RSA	Republic of South Africa
SOX	Sarbanes-Oxley Act of 2002
UNISA	University of South Africa
USA	United States of America
VAT	Value added tax

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1. CHAPTER ONE: GENERAL ORIENTATION

1.1 INTRODUCTION

Reports on the procurement process in South Africa's has riddled the country in the past few years; The Arms Deal, first appeared on the country's radar screen in 1998 (the case still to be completed), after a procurement package for just under R30-billion was being signed. A series of allegations emerged of fraudulent activity concerning many of the contracts, including kickbacks, tender irregularities and over-pricing (Procurement Fraud, 2012a). Most recently the Celle – Saga (Commissioner of Police - R500-million lease deal) has taken centre stage. This case has been described as “*shady and dodgy*” in months gone by, as it did not follow normal tender processes (Procurement Fraud, 2012b).

The occurrence of tender fraud is not only limited to the public domain, incidents of tender fraud in the mining industry has also seen the light. A construction firm won an irregular tender at Kumba Iron ore's, Thabazimbi mine in Limpopo for the building of an early-childhood development centre, this after the construction firm built a house for the supply chain manager of the aforementioned mine – insinuating collusion between the construction firm and the supply chain manager (Stone, 2015). Another example of tender fraud in the mining industry is that of a supply chain employee in Anglo American Platinum and a supplier, Turbo Tech Pumps. Here, it is alleged that a Contracts Manager of Anglo American Platinum conspired with the owner of Turbo Tech Pumps as to channel various orders to the aforementioned company (Prinsloo, 2015).

In the court case of *Viking Pony Africa Pumps (Pty) Limited trading as Tricom Africa v Hydro-Tech Systems (Pty) Limited and Another* (CCT 34/10) [2010] ZACC 21; 2011 (1) SA 327 (CC); 2011 (2) BCLR 207 (CC), the Honourable Chief Justice Mogoeng Mogoeng indicated there was a heavy onus on organs of state (municipalities, provincial and national departments) to investigate allegations of procurement fraud when they realised it.

Although the Honourable Chief Justice Mogoeng Mogoeng in the above judgment refers to state departments, perhaps in light of the Honourable Judge Myburgh's judgment the same onus rests with companies in the private sector to investigate

procurement fraud and underlined corrupt acts. In *S v Botha and Others* (1) 1995 (2) SACR 598 (w), the Honourable Judge Myburgh stated:

Ek stem saam met die staat se betoog dat die samelewing so gespesialiseerd geraak het en daar soveel wetgewing en bedrywe is wat geadministreer en gereguleer word, dat geen polisie diens in 'n moderne samelewing sonder die hulp van privaatinstanties sal misdaad kan ondersoek en voorkom nie.

Procurement fraud holds a reputation risk as it can cause corporations to be branded as corrupt institutions, scaring off potential investors; causing financial loss.

1.2 PROBLEM STATEMENT

Hofstee (2006:85) is of the view the statement of a problem is not negotiable during research and adds: "No problem, no research." Connaway and Powell (2012:45), Creswell (2014:114) and Salkind (2012:40) assert the problem should be stated as precisely as possible to prevent any discrepancy between what the researcher writes and what he or she means. With what the above authors stated in mind, the researcher has noticed during his career as a Forensic Audit-investigator through various reviews and investigations in the Mining Industry since January 2006, internal controls to detect and investigate the occurrence of procurement fraud, are invaluable.

According to section 34 of the Prevention and Combatting of Corrupt Activities Act, AngloGold Ashanti (AGA) does not have to report occurrences of procurement fraud to the authorities if the value is below the threshold of R100 000.00, except for corruption. The audit-investigation fraternity of the company investigated the cases rather in-house. The company is of the opinion their audit-investigation function is best suited to conduct these in-house investigations since they are familiar with the relevant procurement policies and procedures of the company. The outcome determines if the individuals involved will be prosecuted or not. The presumed insufficient use of the fraud detection strategies in AGA contributes to the small amount of successful prosecutions concerned with procurement fraud.

The researcher could not get statistics regarding procurement fraud only in the global mining sector, but a PricewaterhouseCooper's (PwC) 2014 Global Economic Crime Survey revealed interesting figures regarding procurement fraud in the construction, energy and mining sectors. According to the aforementioned survey,

the construction, energy and mining sectors experience the most corruption and fraud of all sectors. South African organisations suffer significantly more from procurement fraud than other organisations globally. In the PwC survey a comparison was conducted between South African and global organisations regarding incidence of procurement fraud and discovered a 30% higher occurrence of procurement fraud in the South African organisations. The most common type of economic crime in the energy, utilities and mining sectors is procurement fraud and corruption. The survey also revealed that insiders commit 69% of procurement fraud and therefore the improvement of internal controls is critical. The aforementioned percentage is 9% higher than the same survey conducted in 2011 and therefore an increase in procurement fraud (*PwC's 2014 ...*, 2014).

The researcher approached Paul Rautenbach of a private investigation firm, TSF Africa (Pty) Ltd (TFSA), for data regarding procurement fraud. Rautenbach (2016) indicated that TSFA has a diverse scope of investigations and forensic audits that includes investigations of procurement fraud in the South African mining industry. Table 1.1 depicts the reported cases of procurement fraud during the tender phase of the procurement cycle, investigated by TSFA for the period 2010 to 2015:

Table 1.1: Reported cases of procurement fraud

Year	Reported cases of procurement fraud during tender phase	Value "R"
2010	2	876,000.00
2011	1	567,000.00
2012	4	5,032,000.00
2013	4	9,400,000.00
2014	7	16,250,000.00
2015	11	31,700,000.00

The analysis of the figures in Table 1.1 suggests that an increase in the occurrence and the value of procurement fraud during the tender phase has been experienced from 2010 to 2015. Rautenbach (2016) is also of the opinion from his experience in

investigating procurement related crimes that collusion between employees of two companies has a very important part to play during the commission of fraud during the tender phase. From experience in the investigation of procurement related crimes, the researcher concurs with the opinion of Rautenbach (2016).

In light of the PWC survey and data from Rautenbach (2016), the researcher perused the investigating diaries of all thirty-five closed investigation files investigated by AGA and documentary evidence such as procurement documentation (in specific reference to tender documents) in the investigation files for the period 2010 to 2014. In the majority of cases, inadequate internal controls or the bypassing of these controls and collusion, were the main causes of irregularities during the procurement process, in specific reference to the tender adjudication phase of the procurement cycle. This can be attributed to poor contract management that entails different management controls such as, vendor vetting (identifying the vendor); Information Technology related systems to detect duplicate commodities and or invoices and the human element to follow checklists (controls) in place when an invoice is authorised. These internal controls were neglected or bypassed (through collusion) which had a negative effect on the internal and external investigation and the successful prosecution of the perpetrators.

The researcher is of the opinion due to experience and from the data from the aforementioned closed investigation files, that the primary contributor to procurement fraud at AGA is the bypassing of internal controls and collusion between employees and the company submitting the tender.

During the investigation of reported tender fraud cases at AGA, it became clear internal procurement controls play an integral part in the detection, identification and investigation of procurement fraud. The absence of these controls (adherence to policies and procedures dictating the methodology in how a tender enquiry is to be conducted) resulted in procurement fraud and associate irregularities not being identified and not being successfully investigated. This inevitably meant the continuum of the illegal acts and financial loss.

It is therefore of paramount importance that the influence and effect of ineffective procurement controls during the adjudication stage of the tender process, is

assessed and investigated. The management control environment, if effective, resulted in more management controls being identified, and preventative strategy in terms of fraud prevention being implemented, which lead to the decrease in opportunity to commit procurement fraud.

The absences of quantifiable mechanisms such as internal procurement controls have a negative effect on the prevention, detection and investigation of procurement irregularities at AGA. This resulted in an escalation in fraudulent and corrupt acts in the corporate sector because the illicit acts were not timeously identified and thus prevented or successfully investigated.

This research was conducted within the researcher's work environment (the mining sector) at his employer, AGA, and focused on the current internal controls in place to address procurement fraud.

1.3 AIMS OF THE RESEARCH

Gray (2014:53) and Mills and Birks (2014:204) are of the opinion that aims are a statement of the intent and direction of the research. Mills and Birks (2014:204) add that the aims of a qualitative study reveal your intention to readers of your study and tell them what you wish to achieve. According to Khan (2008:75), the main aim of research is to draw a conclusion, which may have regional, national, or universal application depending on samples selected. De Vos, Strydom, Fouche and Delport (2011:94) further points out the aim of research is something planned or done. Flick (2011:89) is of the view research aims is the anticipation to create new knowledge and theories. To satisfy what the above authors stated in mind, the aim of this research was to assess the internal controls in place at AGA to investigate and detect procurement fraud. This aim allowed the researcher to make recommendations regarding appraising internal management controls to detect and investigate the occurrence of procurement fraud during the tender phase in the procurement cycle.

1.4 PURPOSE OF THE RESEARCH

Babbie (2010:92), Creswell (2014:124), Ruane (2005:11), Singleton and Straits (2010:107) and Welman, Kruger and Mitchell (2005:22) mentioned that the purposes of research are exploration and empowerment. Exploration is the attempt

to develop an initial understanding of something while empowerment according to Lichtman (2014:38) and Robinson (1994:12) can be explained as individuals gaining control of their lives and fulfilling their needs as result of their developing competencies, skill and abilities to take part in their social and political worlds. Denscombe (2010:11), Denscombe (2002:27) and Leedy and Ormrod (2012:140) elaborate research is:

- **Evaluation:** the research has investigated particular programmes, policies or case files intending to weigh up the strengths and weaknesses and consider how things might be improved.
- **Exploratory research:** the weak points in the procurement cycle, in particular reference to the tender phase, were identified and addressed. The problem has been addressed by exploring and looking for new data by reading literature concerned with the procurement fraud, specifically during the tender phase and interviewing individuals with knowledge and experience in procurement fraud investigation.
- **Developing good practice:** the new found data were used to solve the research problem and make recommendations for good practice to address the problem under research.
- **Empowerment:** this research generated new knowledge and it may empower other individuals, by publishing an article and presenting the articles at lectures.

Other individuals meant to be empowered through this research are internal auditors, company investigators and procurement employees by providing experience and new knowledge concerning internal controls in the procurement process and the detection and investigation of procurement fraud. In addition, the researcher attempted to empower “Top Management” in the mining fraternity through this research by reporting findings and providing recommendations on the research topic. This research empowered the researcher and his colleagues to solve practical problems and improve current procedures addressing procurement fraud and internal controls.

1.5 RESEARCH QUESTIONS UNDER INVESTIGATION

Du Plooy-Cilliers, Davis and Bezuidenhout (2014:69), Leedy and Ormrod (2012:38), Mills and Birks (2014:204), Mouton (2001:53), Punch (2011:36-37) and Wagner,

Kawulich and Garner (2012:18) state that research questions are devised so to focus on the research problem identified and express of interest and intent. Research questions assist to gather new facts and methods to be utilised (Leedy & Ormrod, 2012:38 and Rule & John, 2011:28). Leedy and Ormrod (2010:56), Mills and Birks (2014:204), Punch (2014:76) and Salkind (2012:44) mentioned that research questions express of interest and intent.

Adding to Flick (2011:90), Rule and John (2011:31) and Wagner et al. (2012:18), research questions must be limited to between two and four questions because too many research questions will cause the focus of the research to be wide-ranging. The researcher has opted for two research questions in this research. To stay focused on the problem and in adherence to the above-mentioned authors' proposals; the researcher focused on the following researchable questions:

- What does procurement fraud entail?
- Do internal controls contribute to the detection and investigation of procurement fraud during the tender phase?

1.6 KEY THEORETICAL CONCEPTS

Berg (2004:29), Blaxter, Hughes and Tight (2001:36) and Leedy and Ormrod (2012:44-45) articulate key concepts of research should assist you in focusing on the work accessible. Ruane (2005:51) emphasises the research must choose definitions best suited to the research being conducted. To adhere with the above-mentioned authors suggestions: definitions that provide meaning of which the meaning will stay the same, the researcher have opted for the following concepts:

1.6.1 Forensic investigation

Zinn and Dintwe (2015:443) state that forensic investigation is the practise to lawfully establish evidence and facts to be presented in a court of law or at another form of hearing or tribunal.

1.6.2 Crime investigation

Benson, Horne and Jones in Zinn and Dintwe (2015:19) defines criminal investigation as a systematic, organised, thinking, reasoning, examination and

analysis process designed to search for truth, during which an inquiry and thorough analysis are conducted on all types of crimes or unlawful acts.

1.6.3 Commercial crime

Commercial crime can be defined as all crimes taking place within the commercial domain, including common law and statutory offences and regulations (South African Police Service, 1995:02).

1.6.4 Assessment

Loughran (2010:75) is of the opinion that assessment is to inspect, recognise, evaluate, observe and/or estimate the nature, value or quality of a process and/or item at a specified level.

1.6.5 Internal control

Gelinas, Dull and Wheeler (2012:228) define internal control as a process designed to provide reasonable assurance to management regarding the achievement objectives in the following categories: effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations.

1.6.6 Corruption

It is the abuse of entrusted power for personal gain or benefit of a group to which one owes allegiance (Williams & Alan, 2000:55).

1.6.7 Procurement fraud

Procurement fraud can be defined as the offering, giving, receiving, or soliciting anything of value to influence a business decision (Institute for Certified Fraud Examiners Learning Material, 2010:701).

1.7 VALUE OF THE RESEARCH

Denscombe (2002:43) and De Vos et al. (2011:94), are of the opinion research must contribute to new knowledge. This research has added new knowledge in the following areas and population:

1.7.1 Academic

The Academic Community by providing additional knowledge to academics. The South African Public by providing information regarding the subject under investigation to empower themselves with the knowledge and stimulate their way of thinking concerning procurement fraud and its effects. For students, the research will be available as reference material for study, as a source of literature for research projects and may also stimulate further research in this field.

1.7.2 Law enforcement

The results of the research may contribute to a higher competence level during forensic and criminal investigations and an increase in convictions in terms of procurement fraud during the tender phase. Recommendations were made regarding appraising internal controls for the detection and investigation of procurement, ensuring reviews is more effective and assessment of the said illicit act.

1.7.3 Mining sector

The research assisted understanding the problems experienced with procurement fraud and the effects it may have on the industry. New and more effective procedures were recommended to address the problem because of the research conducted. This would ensure early detection and proper investigation of procurement fraud, which would cause a decline of procurement fraud and financial loss to companies. This research would also enable management to decide on how to address issues concerned with procurement fraud. In addition, this research would assist audit-investigation fraternity in the mining community by providing guidelines during appraising the control measures while investigating alleged procurement fraud. The AGA forensic investigation methodology can be amended to include literature that will add value.

1.8 RESEARCH DESIGN AND APPROACH

Flick (2011:89), Lichtman (2014:3), Marshall and Rossman (2011:59), Ritchie, Lewis, Nichollis and Ormston (2014:48-70) and Welman et al. (2005:52), agree a design is a plan or complete strategy to get research participants and obtain information from them. Maxfield and Babbie (2005:109) believe a research design

entails a set of decisions regarding the research topic, the aims of the research, the population and what research methods to be used and the purpose thereof.

This research constitutes a phenomenological study because it explores the problem as experienced by the participants and the aim is to obtain a deeper insight to assist the researcher to be in contact with the world view perspective (Mills & Birks, 2014:182). According to Creswell (2013:69) and Du Plooy-Cilliers et al. (2014:28), phenomenological studies report and form part of a qualitative research approach because the common meaning of several individuals regarding their life experience of a concept or phenomenon. In this study, how individuals make sense of the world, was explored.

To comply with Creswell (2013:69), Du Plooy-Cilliers et al. (2014:28), Flick (2011:89), Marshall and Rossman (2011:59), Maxfield and Babbie (2005:109), Mills and Birks (2014:182) and Welman et al. (2005:52), viewpoints and to attain the research, the qualitative research approach was utilised and an empirical design plan or strategy was used to obtain the information.

According to De Vos et al. (2011:65), Leedy and Ormrod (2005:133) and Ritchie et al. (2014:37), qualitative research is undertaken when the researcher wishes to discover what the participants' opinions and views are regarding a problem and how they experience it. Interviews were conducted with individuals within the audit - investigation fraternity at AGA, to establish what the true nature of procurement fraud is and how internal controls detect this kind of fraud.

Flick (2011:89) and Marshall and Rossman (2011:59) further add qualitative research is conducted due to the experience of the researcher. The researcher has experience in assessing internal controls in policies and procedures to detect and investigate procurement fraud. Due to this experience and the search for further knowledge, the researcher was compelled to conduct this research.

Denscombe (2002:124) believes empirical data is based on real world observations, particularly: to obtain information directly from the participants and to rely on their personal experiences. Denscombe (2002:6) adds empirical research is concerned

with getting out of the office and purposefully going to look for information. This viewpoint was embraced.

Gratton and Jones (2004:8), Punch (2014:4) and Welman and Kruger (2002:57) also mentioned that empirical research supports developing new ideas through collecting data and is concerned with interviews and the analysing of secondary data sources. The statements of the above authors were complied by conducting interviews within the audit-investigation fraternity whom utilise appraising internal controls to detect and investigate procurement fraud.

1.9 TARGET POPULATION AND SAMPLING

1.9.1 Population

Hair, Celsi, Money, Samouel and Page (2011:165) and Welman et al. (2005:52, 162), state a population is the study of objects that may comprise groups, individuals, human products, events, organisations and the conditions they are exposed to or elements applicable to a research project. In this study, the population will be the audit-investigation fraternity of Group Internal Audit consisting out of 60 individuals based in Orkney, Carletonville and Johannesburg in South Africa. This group is responsible for the audit-investigation function concerned with internal controls on AGA mining operations in South Africa, Africa, the Americas and Australia. The aforementioned group functions primarily out of AGA's group Internal Audit Offices in South Africa. Due to time and financial constraints, the total population could not be interviewed and therefore a sample was drawn. A probability sampling method was used to draw a sample of 25.

The population of this research consisted of individuals from the audit-investigation fraternity within AGA's Group Internal Audit Department in the Orkney, Carletonville and Johannesburg area, falling within the working environment of the researcher. The individuals of the population, which consisted out of 60 individuals, operate as one unit and are based in the above-mentioned areas to address the needs of AGA business units in South Africa and on the aforementioned continents. These individuals are qualified in the same field, have similar qualifications and experience, received similar training, have similar job descriptions and are affiliated with the Association of Certified Fraud Examiners and Certified Internal Auditors.

1.9.2 Sampling

The aim of selecting a sample in qualitative research is not to generalise, but to select the participants that can provide robust, rich and deep levels of understanding of the phenomenon under investigation. This means the people who lived or experience the circumstances of the phenomenon under investigation (Gray, 2014:208). There are no rules to the appropriate sample size, but because of the in-depth interviews with the purpose to find rich information, the sample size is small but it should not be so small that data saturation will not be reached (Leedy & Ormrod, 2012:97). Due to this reason, the researcher drew a simple random sample of 25 people from the identified population and therefore every member of the population had an equal opportunity to be included in the sample. The names of all the individuals within the audit-investigation fraternity were written separately on a piece of paper and placed in a hat and 25 names were drawn.

1.10 DATA COLLECTION

1.10.1 Data

Data for the research were obtained from literature such as books and documents. Documents which included reports, official briefs, instructions and Standard Operating Procedures of AGA and media as papers, newsletters, journals and magazines, were scrutinised for information and data. Empirical data was obtained from interviews and data from the researcher's experience.

1.10.2 Literature

Blaxter, Hughes and Tight (2006:122), De Vos et al. (2011:328-341), Fink (2010:196) and Leedy and Ormrod (2010:146) are of the view that literature refers to all the available research on a subject or topic. The literature utilised during the research was obtained from libraries and the internet. Sources comprised of international and local literature, including books, journals, articles, newspapers, research dissertations training material and internet sources. These were perused to obtain relevant information for this research. Where applicable, the latest literature sources available were searched for and used as a reference in the study.

The data in the literature were compared with the data obtained from the participants. The information obtained from literature sources were combined with

the information obtained from other data gathering techniques and reported in this format in this research document.

1.10.3 Interviews

Jupp (2006:157) argues that an interview represents a meeting or dialogue between people where personal and social interaction occurs, but for research: An interview is a two-way dialogue in which the interviewer asks the participant questions to collect data and learn about ideas, beliefs, views, opinions and behaviour of the interviewee.

As proposed by Barbour (2014:337), Hesse-Biber and Leavy (2011:102), Lichtman (2014:248), Mills and Birks (2014:188), Mouton (2001:105) and Wagner et al. (2012:133), the researcher conducted semi-structured interviews relying on a certain set of questions in the attempt to allow the conversation to remain loose. This method allowed participants some leeway and freedom to express their interest concerning the subject at hand. These semi-structured interviews afforded the opportunity to obtain new and broad views of the participants and allowed to ask additional questions to resolve any unclear answers provided by the participants. Open-ended questions were used, allowing for additional questions to be put to the participants to explain vague answers.

The interview was conducted in private surroundings (an office) and was based on a fact-finding process. Candidly, interviews with the research participants were conducted with an interview schedule with the same questions and whereon the answers were recorded. All the questions were put to the participants and the answers written. The questions of this schedule addressed the research questions and the research topic. The research participants are role-players in detecting and investigating procurement fraud. The information provided by them gave a complete, broad and holistic picture of appraising internal controls to detect and investigate procurement fraud.

1.10.4 Personal experience

The researcher experienced five years in investigating crime while employed in the South African Police Service, three years in the Mining Security fraternity and five years as a Forensic Auditor-investigator in the audit-investigation domain. The

researcher was also part of an elite precious metals investigation unit, the National Investigation Task Team (NITT) and acted as liaison person to AGA while part of the mentioned team.

In the audit-investigation locale, various allegations of procurement irregularities in the mining sector were investigated. The knowledge and experience gained from these investigations were applied daily into similar alleged irregularity reviews.

A National Diploma in Policing from UNISA and a Certificate in Criminal Justice and Forensic Investigation from the University of Johannesburg during 2009 was obtained. A B-Tech degree in Forensic Investigation was obtained from UNISA during 2010.

1.11 DATA ANALYSIS

Data analysis is the process of bringing order, structure and meaning to the mass of collected data (De Vos et al., 2011:397). As suggested by Barbour (2014:253) and Leedy and Ormrod (2012:159), the data were reviewed a few times and the information was divided into controllable subjects, patterns styles and relationships. The spiral analysis method was used to analyse the data. By using the spiral method and the advice of Creswell (2013:182), Leedy and Ormrod (2010:159) and Sharp, Peter and Howard (2002:113) the arrangement of the data produced new knowledge. In bringing order to the data, the following steps in the spiral analysing method were used:

Organisation - The data was organised by breaking it into smaller pieces and creating a computer database.

Perusal - The data collected was perused several times to obtain a sense of what the data contains as a whole.

Classification - To get the meaning of the data, the data were grouped into categories or themes.

Synthesis - Synthesis was attained by integrating and summarising the data.

Induction - By incorporating known facts into the research as a general rule.

Deduction - By studying all the facts (literature and interviews) which resulted in arriving at answers for the research questions posed. The outcome of the data

analysis enabled the researcher to make findings and recommendations regarding the research questions.

1.12 METHODS TAKEN TO ENSURE VALIDITY

Creswell (2014:201), Denscombe (2002:301), Flick (2011:207), Leedy and Ormrod (2012:104) and Wagner et al. (2012:243), indicate that validity centres around the degree to which research data and the methods utilised to obtain it, are correct, truthful and on target. The researcher ensured compliance with the following validity measures during his research.

1.12.1 Sampling

The target population represented individuals from the audit-investigation domain, who is involved in the detection and investigation of procurement fraud at AGA. The mentioned individuals have similar experience, qualifications and training. The simple random sampling method used during this research, is a known qualitative research method. Interviews were conducted with more individuals than the proposed minimum participants.

1.12.2 Literature

The researcher conducted a wide-ranging search to obtain literature regarding the subject under research. The researcher made use of newly published books and seminal sources,¹ relevant to the topic under investigation. Recognition and citations were awarded to the authors of literature in the dissertation. Quotes from literature sources were recorded correctly and the data obtained was not manipulated and correctly referred to. Plagiarism was not entertained and a detailed list of references was compiled.

1.12.3 Interviews

De Vos et al. (2011:350), suggest that the reason for the interview be explained to the participant before the commencement thereof, the researcher complied with this suggestion. The researcher guaranteed the interviewee's confidentiality and the interview was conducted in a discreet location to ensure privacy and that the participant's attention was not diverted (Leedy & Ormrod, 2010:149).

¹ A seminal source is the original source or base information of which the content has not changed.

The research questions and aim of the research determined the contents of the interview schedule and were based on the identified problem. A standard interview schedule was used for all the participants. This ensured that the same questions posed, assessed what they were theoretically supposed to measure. Identical questions in terms of the interview schedule were put to all the participants and they were not influenced during the interview. Sometimes, additional questions for clarification were asked that were not necessarily put to other participants.

1.12.4 Analysing of data

To ensure that the research results were not deceptive, the researcher made use of approved and valid data analysis techniques. “Validity means the accuracy; meaningfulness and credibility of the research, and that it will be worth the time and effort when you draw meaningful and defensible conclusions from data” (Leedy & Ormrod, 2010:28). This researcher complied with the description of validity. The validity of the data can be supported, as it is actual information, reflecting the true state of affairs at the time of the research. The data in the research can be validated consequently if compared to the data in literature and personal experience.

1.13 METHODS TAKEN TO ENSURE RELIABILITY

Maxfield and Babbie (2005:130), Mouton and Marais (1992:81) and Ritchie et al. (2014:354), articulate that reliability is a matter of whether a certain measurement method applied repeatedly to the same article will produce the same result each time. Reliability is the consistency with which a measuring instrument yields a certain result when the entity being measured did not change (Leedy & Ormrod, 2012:91).

1.13.1 Sampling

The sample represented individuals from the audit-investigation fraternity at AGA, who was involved in assessing internal controls for the detection and investigation of procurement fraud. All the individuals from the audit-investigation fraternity that forms part of the population in the Orkney, Carletonville and Johannesburg areas, had an equal opportunity to be included in the sample.

The mentioned individuals have similar experience and training. The sampling technique is reliable because if another researcher was to undertake the same research, he or she opted for the same sampling.

1.13.2 Data collection

Recognition and citations were awarded to the authors of literature in the dissertation. Internet information utilised during the research was referenced to the website addresses where the data were obtained. In reference to what Singleton and Straits (2010:49) argues, the researcher guarded against plagiarism. Documentation (not copyrighted material such as textbooks readily available) utilised during the research is available for examination. The data obtained from literature addressed the research questions under review.

Data obtained from interviews regarding the research questions, was complete and the quality was excellent. Open-ended questions, in conjunction with semi-structured interviews, were conducted with all participants, which did not limit the interviewer in only asking questions from the interview schedule. The various individuals were interviewed utilising the same interview schedule. The same questions were asked to all the participants, except on follow-up questions to individuals and no misleading was noted. The aforementioned interview schedule was drafted in conjunction with the study leader in this research. During the interview, the researcher listened attentively and the answers received were recorded verbatim as provided by the participants and were not manipulated. The researcher did not remark on any answers provided by the participant and no leading questions were asked. This ensured that if different researchers used the same interview schedule, that the outcome would be the similar.

The researcher's experience as an investigator allowed him to use creative methods during the interview to obtain valuable information from the participants. The participants were not forced to answer questions and their responses were their own version. A letter was forwarded in which the participants' voluntary participation was requested and confirmed in the interview process.

1.13.3 Analysing of data

The method utilised in this research to analyse the data is a recognised technique used in qualitative research to analyse data.

1.14 ETHICAL CONSIDERATIONS

Maxfield and Babbie (2005:53) state that any person planning to conduct research in the criminal justice field should be sentient of the general agreements between researchers concerning what is proper and improper conduct during the inquiry. Mouton (2001:238) confirms the latter by stating the ethics of science are concerned with what is wrong and what is correct when conducting research. The researcher is adamant of the importance of retaining morally accepted norms and values in scientific research, which he complied with in this scientific research. Plagiarism was not entertained, sources were correctly referenced and acknowledged in this research. The data from literature was correctly cited and the author(s) was acknowledged in the text and reference list of this dissertation. Denscombe (2002:134) points out that a social researcher should be ethical in the collection and the analysing of data and in distributing findings of the research.

The researcher complied with the expectations as pointed out by Denscombe (2002:134). Data gathered during this research was not manipulated.

During the interviews the privacy of the participants were respected, and they were not misled. The responses from the participants were written in their presence and after the interviews, the responses from the respective participants were confirmed singly. The researcher acted ethically at all times and was objective. The participants were not discriminated against or influenced during the interview.

The findings of this study are based on the research conducted and is accurately portrayed in this dissertation. This research will be available in the public domain and follow-up articles regarding this research will be published in accredited journals.

Permission for conducting this research was obtained from AGA before the commencement thereof and the researcher made an ethical declaration to UNISA concerning this research on its conclusion.

According to Du Plooy-Cilliers et al. (2014:190), Leedy and Ormrod (2012:104-108), Ritchie et al. (2014:78), and Wagner et al. (2012:88), ethical issues fall into four categories with which the research complied with as discussed below:

Table 1.2: Ethical issues

Category	Researcher's responsibility
Protection from harm	The researcher ensured that the participants endured no physical or psychological harm. The participants were not subjected to strenuous or embarrassing situations. The tone of the interview was of such a nature as not to offend the participants. The interview itself was conducted in solitude and the researcher inquired on regular intervals if the participants were comfortable.
Voluntary and informed participation	The participants were approached and requested to participate only voluntarily. They were informed of the scope of the research to make a calculated decision to participate. Nobody was forced to participate in this study and the participants were made aware that they could discontinue their participation at any stage.
Right to privacy	The identity of the participants was kept anonymous and the information shared by them is kept confidential. Their responses were presented in an anonymous manner in the dissertation.
Honesty with professional colleagues	Participants in the research were informed of the processes to be followed and the purpose of this research. All the participants were treated equally.

1.15 RESEARCH STRUCTURE

To assure a well-structured research report in which the content flows in a logical order and in which the research aims and questions are addressed, the chapters were outlined as follows:

Chapter 2: Procurement fraud

The focus of this chapter is on important aspects of forensic and criminal investigations and procurement fraud. A detailed review of the tender stage of the procurement cycle and associated irregularities was conducted to address the research question concerned with the detail of procurement fraud. In addition, red flag indicators of procurement fraud were examined to obtain an understanding how these indicators can assist in investigating procurement fraud.

Chapter 3: The contribution of internal controls to detect and investigate procurement fraud during the tender phase

In this chapter, the focus is on important aspects of internal controls to detect procurement fraud as a risk and to discuss the research question of the contribution of internal controls to detect and investigate procurement fraud during the tender phase. Facets discussed comprised of the concept of internal controls, the necessity of internal controls in the procurement process and an analysis of policies and procedures in business and risks associated if no policies and procedures are in place. To conclude the discussion, the necessity of regular assessment and audit of internal controls in procedures and policies, is reviewed.

Chapter 4: Findings and recommendations

This chapter informs the reader of what was discovered during the research and relates to the aims and research questions on which the findings and recommendations are based.

2. CHAPTER 2: PROCUREMENT FRAUD

2.1 INTRODUCTION

Mining companies are losing enormous amounts of capital on procurement contracts because of misrepresentations made by contractors and lacking accountability procedures by a company. Recent numbers indicating that general market fraud in South Africa, including procurement fraud, has risen from 5% in 2009 to 15% in 2012 (Greve, 2012).

Mining companies are susceptible to procurement fraud because of the capital outlay of mining projects which is frequently far more extensive than that of other sectors creating the potential for a costlier financial loss. The collusion between employees and contractors may cause the non-delivery of work and the authorisation of variation orders on contracts increased in value to such an extent, that they should have returned to the market for tender (Greve, 2012).

To add to this, Geis and Meier (1977:40) and Greve (2012) reason white-collar misconduct in the business environment takes on the form of commercial bribery, bribery of public officials directly or indirectly conclude high value contracts, and various other forms, including procurement fraud.

This chapter will further focus on important aspects of forensic and criminal investigations and procurement fraud. A detailed review of the tender stage of the procurement cycle and associated irregularities will be conducted to discuss the research question concerned with the detail of procurement fraud. In addition, red flag indicators of procurement fraud will be examined to obtain an understanding how these indicators can assist in investigating procurement fraud.

2.2 CRIMINAL INVESTIGATION

Marais and Van Rooyen (1990:17) motivate investigating any crime is sometimes wrongly seen as a haphazard process, while in practice; the investigation of crime is a systematic process with the goal to discover the truth. Tong, Bryant and Horvath (2009:7), ads there are different viewpoints on the investigation of crime and they mention that criminal investigation is characterise with the words “art,” “craft” and “*science*.” They see the art of criminal investigation as intuition, natural and

automatic feelings of problem solving. The meaning of crime investigation is further explored below.

2.2.1 The meaning of crime investigation

Buckles (2007:5) states that the word investigation is arrived from the Latin word *investigare*, which suggests tracking, inquiring into, searching for, or examines systematically. According to Unisa (2002:4), crime investigation comprises a systematic gathering and clarification of information of the alleged crime or incident. Benson et al. in Zinn and Dintwe (2015:9), Brandl (2014:3), Dantzker and Hunter (2012:6), Lochner (2014:6) and Monckton-Smith, Adams, Hart and Webb (2013:3), describe crime investigation as a systematic search for the most accurate and complete description or explanation of the events or collecting of crime information or behaviours being studied or investigated.

Bennett and Hess (2004:6), Casey (2011:16) and Greene (2007:356) all refer to the reconstruction of past events as the investigation of crime. The above authors see the reconstruction of past events as a logical process whereby a careful evenly examination and observation is done to record evidence. According to Brandl (2014:XXI) crime investigation and evidence are inseparable and he mentioned that criminal evidence is collected to establish proof that a crime was committed.

Gilbert (2010:34), Lochner (2014:7), Osterburg and Ward (2014:1-2), Van Heerden (1982:182) and Van Rooyen (2004:4) reason in the process of reconstructing past events, evidence is collected. This evidence can be subjective or objective clues. Subjective clues are evidence or information obtained from people and objective clues is physical evidence. According to these authors this information is collected to identify, apprehend and convict offenders as an integral part of investigating past events. According to the researcher, this refers to proof that a crime was committed.

A simplistic explanation of what crime investigation encompasses is found in Lochner (2014:6). He is of the opinion that crime investigation is the search for the truth aimed at solving the crime transgression or irregularity. According to him, this definition was formulated over a period. In reviewing and analysing the description and the explanations of crime investigation, the following common but very important themes were identified and are interrogated below:

2.2.1.1 Systematic

Zinn (2007:87) in his research mentioned that crime investigation could not be undertaken in an illogical or unintentional manner. A systematic plan of action or investigation process during which information is collected, is the cornerstone of any criminal investigation.

Benson et al. in Zinn and Dintwe (2015:9), Buckles (2007:5), Hess and Orthmann (2010:6), Lochner (2014:7-8), Newburn, Williamson and Wright (2007:86) and Van Rooyen (2001:50) all refer in their version and discussion of crime investigation to the word “systematically.”

Hess and Orthmann (2010:6) further elaborate on the systematic process and reason crime investigation is the systematic process of discovering, collecting, preparing, identifying and presenting evidence to determine what happened and who is responsible. This is in line with the views of Du Preez (1993:2), Gardner (2012:2), Marais and Van Rooyen (1990:17) and Zinn (2007:6) who strongly engages with the idea that these aspects are done to prepare for the legal process. The second theme identified is truth, discussed below.

2.2.1.2 Truth

Van Heerden (1986:189) provides a short but well-defined description of crime investigation by stating that it is a systematic search for the truth. In addition, it was noted by the researcher that central to the definitions of crime investigation by Bennett and Hess (2004:4), Forbes (2008:17), Gardner (2012:3), Lochner (2014:6), Monckton-Smith et al. (2013:2), and Van Rooyen (2001:50) is the word truth. They are further of the opinion that the sole purpose of crime investigation will always be to search for the truth that includes determining a suspected person’s innocence. Although Van Heerden (1986:189) does not provide a detailed description of the concept of truth, it will be an error to argue that the truth means only a guilty finding by the court. The researcher is in agreement with the above authors due to his experience.

After the analysis of the responses from the research participants, it is significant to note that only one participant with investigation experience used the word “truth” during his explanation of what crime investigation is. In reference to the

above-mentioned responses and the analysis of the literature, the last theme identified was the solving of the crimes.

2.2.1.3 Solving the crime

Buckles (2007:5), Dantzker and Hunter (2012:6), Forbes (2008:17), Hess and Orthmann (2010:6) and Monckton-Smith et al. (2013:2), all agree that the principle purpose of crime investigation is to solve the crime. Monckton-Smith et al. (2013:2), further elaborates on the purpose and argue that during the investigation of crime, it is the responsibility of the investigator to determine what happened and who the responsible party is. In the South African context, the Constitution of the Republic of South Africa Act 108 of 1996 stipulates under section 205 (3) that it is the responsibility of the South African Police Service to solve crime. This in effect means that it is the responsibility of the South African Police Service to determine what happened.

Benson et al. in Zinn and Dintwe (2015:19), Lochner (2014:6) and Monckton-Smith et al. (2013:2), refer to a criminal investigation as an inquiry to expose the truth of the matter. These authors elaborate further, by stating that during crime investigation, it needs to be ascertained if an offence has been committed and who the responsible person(s) is and the gathering of admissible evidence which will be presented before a judicial authority (court). Adams, Caddell and Krutsinger (2004:3), Fish, Miller and Braswell (2011:15), Gilbert (2010:103), Lochner (2014:172) and Lochner and Zinn (2015:10), additionally, are of the opinion (from a crime scene investigation perspective), that crime investigation is not only to obtain information of witnesses and victims, but also to collect visible or invisible physical evidence at a crime scene that could assist in solving a crime.

The participants in this research were requested to explain what their understanding of criminal investigation is and the most consistent response was that a criminal investigation is concerned with the investigation into facts of an act against a law. One participant with more investigation experience further elaborated that crime investigation also comprises of forensic investigation as a technique to investigate criminal activities. A participant with more audit experience was of the opinion that a criminal investigation is initiated to prove the guilt or innocence of a person(s). The

facts as discussed above are also applicable to proactive and reactive crime investigation, which will now be further examined.

2.3 PROACTIVE AND REACTIVE CRIME INVESTIGATION

Brandl (2014:4) and Tong et al. (2009:11), is of the opinion that the investigation of crime can be categorised as proactive or reactive. Proactive crime investigation is when a crime is expected by the police and through methods such as intelligence gathering and observation, they wait for the right time to arrest the suspects as they commit the crime. Reactive crime investigation is crime already committed and evidence must be obtained to link the unknown or known suspect to the crime by using objective or subjective clues. It is the opinion of the researcher that the investigation of procurement fraud may be proactive (information about probable collusion between the tenderer and an employee was received prior to the tender adjudication and contract award) or it may be reactive (assessing internal controls in the tender phase indicates there was a deviation from the normal process, raising red flags that triggered the need for further investigation). After exploring the concept of crime investigation with its different aspects, it would be prudent to examine forensic investigation and the nexus it has with the investigation of crime.

2.4 FORENSIC INVESTIGATION

Karagiozis and Sgaglio (2005:3) state that the term forensic has its origin from the Latin word combination of *forum* plus *ensis*, reminiscence of the public forum that the Romans used to debate legal matters and decisions were made of the said.

Inman and Rudin (2001:5) and Van Rooyen (2008:14) point out that forensic investigation is a term regularly misused to give weight to an idea or statement. The word forensics has some sort of aura of reliability surrounding it (because it is scientific, it can be trusted). Forensics are also used to discredit an idea or statement (it is not scientific therefore it cannot be trusted).

To elaborate on the view of the above authors, Benson et al. in Zinn and Dintwe (2015:19), Karagiozis and Sgaglio (2005:vii) and University of Johannesburg's Criminal Justice and Forensic investigation study guide (2009:4) reason forensic investigation is an in-depth, meticulous and systematic search for the truth that can comprise objective (accounts of witnesses and victims) and subjective (physical

evidence such as knife or gun) clues by gathering and recording of information, observation and the search for answers. Karagiozis and Sgaglio (2005:vii) see the truth as the proof of a person's guilt or innocence.

Gardner (2012:1-2) is of the opinion that forensic investigation can be regarded as the collecting of details which could serve as evidence in a court of law. It is the researcher's critical view that this author omits to provide a detail description of forensic investigation that may lead to a wide-ranging interpretation of the concept open to criticism. Benson et al. in Zinn and Dintwe (2015:18), and Dintwe (2014:49) argue much confusion and debate exist in the investigation domain concerning the term "forensic investigation." They conclude that investigations conducted by the private and corporate fraternity fall within the bounds forensic investigation.

It is also the view of the researcher that the discussion of crime investigation does not differ from that of forensic investigation as both these concepts are concerned with finding the truth.

The participants were prompted of their understanding of the concept on forensic investigation. The majority of the responses were that forensic investigation is only concerned with the investigation of fraud or monetary loss. Two participants with more audit experience indicated that it is the examination of documents. The researcher is of the opinion that the reason for the above responses is because the participants in this research is familiar with investigations in the private sector and therefore associate forensic investigation with an in-house investigation of fraud related cases.

In the context with the responses received as discussed above, Van Rooyen (2008:14) is of the opinion that forensic investigation is linked to the investigation of corruption, fraud, embezzlement and or other white-collar crimes. The researcher is of the opinion that this includes the investigation into procurement fraud of white-collar crimes. Aspects central to the term forensic will be discussed in more detail *infra*.

2.4.1 Forensic investigation in criminal and civil proceedings

According to Pyrek (2007:16) forensic investigation is applying science in criminal and civil matters. White (2010:2) elaborates and provides a broader explanation what forensic investigation is. According to him, forensic investigation includes a wide spectrum of criminal litigation procedures, including consumer and environmental protection, health and civil matters and civil and criminal negligence. He is supported by the view of Benson et al. in Zinn and Dintwe (2015:19-20), who are of the view that forensic investigation forms part of criminal and civil proceedings.

To add to the views of the above authors, Echaore-McDavid and McDavid (2008:ix), Lambrechts (2001:93) and Stelfox (2009:132) state that forensics are the application of special knowledge to legal issues and is not limited to the investigation of crime, but also plays an integral role in applying civil litigation. In contrast, Nickell and Fischer (1999:1) additionally, see forensic investigation as the investigation applicable to courts. The aforementioned authors do not specify if they are referring to criminal or civil courts, but in their discussion, the researcher gathered that the authors are referring to criminal courts.

From the sample participants, four participants with more audit experience were of the opinion that forensic investigation is the investigation into irregularities with the purpose to institute departmental hearings and to implement measures (controls) to safeguard against irregularities identified during the investigation. The majority participants with more investigation experience indicated that forensic investigation is concerned with the use of scientific methods such as handwriting and fingerprint analysis and the use of video and audio surveillance to obtain evidence of illicit activity. This evidence to be tendered in front of the court and or civil proceedings. The inference made by the researcher of these responses is that the participants with more audit experience indicates disciplinary or administration corrective measures while the participants with more investigation experience goal is to obtain proof to institute criminal proceedings.

2.4.2 The use of scientific methods in investigation

The researcher argues that forensic investigation comprises applying two disciplines namely, natural and social sciences as depicted in Figure 2.1 below:

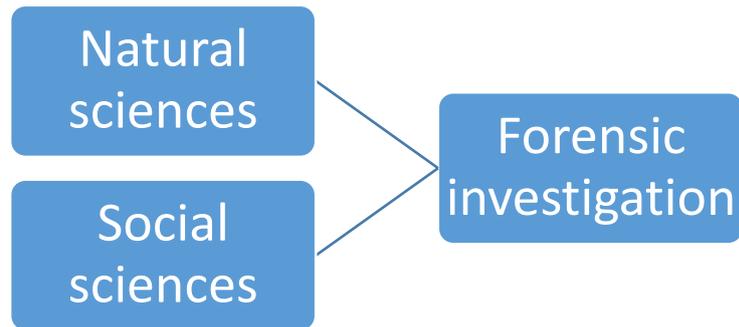


Figure 2.1: Applications of forensic investigation

To support and elaborate on the researcher's argument, Echaore-McDavid and McDavid (2008:ix), Pyrek (2007:16) and White (2010:2) mention that forensic investigation includes the use of scientific methods during the investigation of crime but did not explain what are meant by scientific methods. Karagiozis and Sgaglio (2005:1) and Tong et al. (2009:183), explain scientific methods and are of the viewpoint it is the use of natural sciences of aspects relating to law. According to them forensic investigation covers a wide spectrum of natural science and scientific disciplines (Entomology – Study of Insects, Toxicology – Study of Poisonous substances, Dactylography – Study of Fingerprints) whose purpose it is to investigate crime with the goal to bring the guilty party to book. Dintwe (2014:196), Lambrechts (2002:83), Lambrechts (2001:93), Lambrechts and Theart (1996:1) and Nickell and Fischer (1999:1) additionally state that forensic investigation is the application of some or other scientific knowledge to a legal problem. To align the science aspect of this research subject, the researcher is of the opinion that Graphology – the study of handwriting may be applied during the investigation into procurement fraud.

In relation to the social science aspect of forensic investigation, Nickell and Fischer (1999:1) state that the term forensic is so broad and includes criminology and applying social science. Monckton-Smith et al. (2013:8), concurs with Karagiozis and Sgaglio (2005:14) and states that forensic investigation is a continuously developing, multi-dimensional field that combines social science and natural science in a structured process within the bound of laws and procedure. Padhy (2006:1), additionally, is of the opinion that forensic investigation is a field in Criminology, a subfield of social science.

It is the researcher's critical analysis that the scientific aspect of forensic investigation is concerned with natural science of the above views, while the social science is applying special knowledge, techniques and skills used by the investigator during an investigation. This may include the skill to successfully interview and apply special methods and techniques to obtain a statement from witnesses or complainants.

In terms of the use of scientific methods, one participant specified that forensic investigation is the use of science and technology to obtain evidence of an illicit act. The next paragraph is to elaborate on what Benson et al. in Zinn and Dintwe (2015:19), mentioned. They see the main purpose of forensic investigation to present evidence in court.

2.4.3 Court orientated

Dintwe (2014:197) and Nickell and Fischer (1999:1) describes forensic investigation as pertaining to, connected with or used in courts of law or public discussion and debate. Forensic investigation is an investigation where the facts of the investigation will be presented before a court of law (Echaore-McDavid & McDavid, 2008:ix, Pyrek, 2007:16 and White, 2010:2).

Lambrechts (2001:93) and Swanson, Chamelin, Territo and Taylor (2011:28) motivate the aim of a forensic investigation is to apply scientific knowledge to the investigation of an incident and to provide impartial evidence on issues to the court. The above authors' views are elaborated on by Horswell (2004:3-4) and Lambrechts (2001:93) being of the opinion that forensic investigation is aimed at instituting court proceedings.

Van der Watt (2011:46) provides a new dimension to the concept of forensic investigation as he is of the opinion it is a process that utilises technology and science to test principles that could be presented in a court of law to explain the events that occurred.

It is the contention of the researcher in view of the statements above that not all forensic investigations are initiated to institute criminal court proceedings as these

kinds of investigations may also be initiated to investigate employee misconduct and or non-compliance with company policy and or procedure.

It can be summarised that forensic investigation and criminal investigation differ little from each other, because the goal of both is to investigate crime and to present the truth before a court. The objectives of an investigation are further researched below.

2.5 OBJECTIVES OF AN INVESTIGATION

Having discussed the concepts of criminal and forensic investigations, it is prudent to examine the objectives of these investigations. According to Van der Westhuizen (1996:4), the concept of an objective differs from that of an aim as an objective precisely defines a commitment or action that must be accomplished within an appointed time and according to a specified standard.

Axelrod and Antinozzi (2007:14), Becker and Dutelle (2013:17-18), Benson et al. in Zinn and Dintwe (2015:19-20), Giacalone (2011:5-7), Hess and Orthmann (2010:33) and Swanson et al. (2011:3), indicate that the following are objectives of investigation:

- Follow-up on clues to obtain and generate additional evidence;
- Identification of the criminal act;
- Individualising the criminal;
- Recovery of stolen property;
- Involvement in the prosecuting process;
- Determine if a crime has been committed or not;
- Arrest the suspect and to present the best possible case before the prosecutor;
- Investigate the crime and to assist the prosecutor in the prosecution process;
- Tracking and preserving of evidence, and
- The responsibility of the investigator on the day of the hearing and giving evidence.

Becker (2000:8) adds another objective to the above list and is of the opinion that the processing of physical evidence is also an objective. The researcher is of the opinion that Becker (2000:8) includes the processing of physical evidence as an

objective as this processing may cause the gathering of further information concerning the investigation.

Bennett and Hess (2004:5) and Van Rooyen (2001:56) state that the following aspects and investigation steps that Benson et al. in Zinn and Dintwe (2015:19), regard as the common features between forensic and criminal investigation are also important for a successful investigation in that:

- A logical sequence of investigation be followed;
- Physical evidence to be gathered in accordance with law and or per prescribed entity policy or procedure;
- Witnesses to be interviewed;
- All suspects to be questioned and within the rule of law, and
- All information of the case to be documented.

The research participants were probed to provide their view of the objectives of an investigation. The majority shared the view that the objectives of an investigation were to obtain evidence concerning an illicit act, discover the truth and to test it in a court of law. One participant with more investigation experience further elaborated it was to recover property. Further to this, two participants with more audit experience indicated that the objective of an investigation may include identifying discrepancies, the causes for the discrepancies and whether the controls implemented, are adequate. Another two participants with audit experience were of the opinion that the objective of an investigation was to obtain documentation to substantiate an irregularity allegation. In the researcher's opinion it is evident from the responses from the participants with more audit experience that their view is assessment orientated to follow up on administration irregularities and the reason (cause) why processes were not followed and to correct these anomalies. The responses from the participants with more investigation experience heed a sense of identifying the person responsible for the illicit act, instituting disciplinary procedures and the recovery of possible losses incurred.

Having discussed the concepts concerning criminal and forensic investigation and the objectives thereof, the investigation element has to be aligned with the illicit act of procurement fraud. Before analysing procurement fraud, the concept of fraud

must be first understood to understand how the crime of procurement fraud during the tender phase, is committed.

2.6 FRAUD

Albrecht, Albrecht, Albrecht and Zimbelman (2012:6) state that fraud is a universal term used, which include all the various means which human creativity can device, to obtain an advantage over another person by false pretence. According to Albrecht et al. (2012:6), a definitive rule can be laid down to describe fraud, as it comprises of trickery, surprise, cunning and unfair ways to cheat another person. The researcher noticed in media publications that the word fraud is also used to describe the crime and that “add-ons” such as cheque or procurement is linked to fraud to categorise fraud into a certain category e.g. cheque fraud or procurement fraud.

Fraud is described by Hints in the Investigation of Crime (1951:391), Joubert (2013:178), Olsen (2010:49) and Technikon RSA (1994:340) as a human venture that involves deception, determined intent, intensity of desire, risk of apprehension, abuse of trust, and rationalisation. According to Burchell (2013:724) and Van Rooyen (2008:128) fraud is committed by a person making a misrepresentation to another person (or entity for instance, with procurement fraud) causing a false impression causing this person to act to his own detriment. Burchell (2013:724) further elaborates that a misrepresentation can be made by conduct alone or by words and conduct. Joubert (2013:179) is of the opinion that a misrepresentation can be made verbally, in writing, by action or conduct. All these aspects relating to misrepresentation in procurement fraud are discussed in point 2.9.

Van Rooyen (2004:178) state that the risk of fraud is higher than before due to increased complexities in companies, misunderstanding of the internal audit function, outdated and ineffective internal controls (ineffective internal controls in the tender phase may be exploited and assist to promote fraud) and complex accounting in companies which leaves open the door for misrepresentations.

The participants in the research were questioned if they had trouble in proving the elements of fraud during a court case and disciplinary inquiry. All the participants indicated it is very difficult to prove the elements of fraud due to the collusion factor

between the individuals in the process and the unwillingness of witnesses to get involved.

The researcher is of the opinion through experience that procurement fraud is considered as an administrative irregularity, as it is always disguised by dishonesty and deception. An impeding factor is that this kind of fraud is routinely committed by the supplier or contractor and the procurement official.

Button and Gee (2013:11-13) argues that: "Fraud is a dynamic crime which is constantly changing with fraudsters identifying new ways to perpetrate it."

In South African Criminal law, every single crime has elements that have to be proven in a court of law before an act can be deemed as criminal. To prove these elements, a person has to understand what they are and therefore the elements of fraud will be discussed. It is the researcher opinion from experience that the act of fraud is also referenced in a company's (private sector) disciplinary code as a dismissible offence and therefore has a civil aspect to it.

2.6.1 Elements of fraud

All the elements of the crime need to be proved in court to find a person guilty of fraud. A consensus exists that fraud consists of five elements: prejudice, misrepresentation, unlawfulness, causality and criminal intent (Minnaar, 2000).

Burchell (2013:724), Burchell and Milton (1997:579), Joubert (2013:166), Snyman (2002:520), Van Rooyen (2008:130), Van Rooyen (2004:178) and Vona (2008:5) are of the belief that the following aspects must be taken into consideration before fraud can be proven. They are seen as the elements of fraud:

- **Distortion** – The perpetrator must have distorted or misrepresented a fact to a prejudiced party. This distortion or misrepresentation can be made in writing, verbally, by conduct, and omission.
- **Prejudice** – Snyman (2002:523) is of the opinion that prior to the court determining that fraud has been committed, the perpetrator must have caused harm to a third party termed prejudice. Snyman (2002:523) elaborates that prejudice may be actual or potential.

- **Unlawfulness** – It has to be proven that the act was unlawful, and not merely a misrepresentation. In isolation, a misrepresentation does not spontaneously constitute fraud. *The Minister of Police v Ewels* 1975 (3) SA 590 (AD), the common rule is, that the unlawfulness of an act or omission is determined according to the perceptions of society to what is legally wrong or right.
- **Specific intention** – The guilty party must have had the specific intention to mislead the prejudiced party, and only to mislead them. In *R v Kruse* 1946 AD 524, *R v Harvey* 1956 (1) SA 461 (T) and *R v Heyne* 1956 (3) SA 604 (A), the perpetrator must intend to both deceive: therefore, the intention to persuade another to believe that something is true which is untrue, and to defraud: therefore, the intention to induce somebody to act to his prejudice on the grounds of the misrepresentation made.
- **Attempt** – This refers to potential prejudice - if a letter or e-mail, comprise of a misrepresentation, forwarded to the prejudiced party and is lost along the way to the intended recipient. Although the letter is lost in the mail, the intention to defraud was present.
- **Misrepresentation made to a person** – In *S v Myeza* 1985 (4) SA 30 T, Myeza’s allegation that by inserting the metal ring of a beer can into a parking meter and actuating it, that the misrepresentation was not made to a person but to a parking meter, was rejected by the court. It was found by the court that the misrepresentation was, in fact, made to the local authorities (municipality) and therefore constituted fraud. According to Burchell (2013:724) a misrepresentation can also be made by silence in that the person remained or not speaking when he or she ought to do so. The research participants elaborated on their view of misrepresentation in Table 2.1 in point 2.9.

The analysis of the definition fraud as defined by Burchell and Milton (1997:579), Joubert (2013:158-161) and Snyman (2002:520) revealed the similarity in the word “misrepresentation.” These sources describe fraud referring to the elements of the crime to wit – intention, unlawfulness, misrepresentation and that actual or potential prejudice may occur. After discussing the crime of fraud and its elements, the concept of procurement needs to be explored to understand this process and what it comprises, to establish how procurement fraud during the tender phase, is committed.

2.7 PROCUREMENT

Procurement can be described as the acquisition of goods, services or works from an external source. It is desirable that the goods, services or works are appropriate and that they are procured at the best possible cost to meet the needs of the purchaser in terms of quality, quantity, time, and location. Companies and public bodies often select processes intended to promote fair and open competition for their business while minimizing exposure to fraud and collusion (Melton, 2008:170).

Concise Oxford English Dictionary (2008:1145) and Morris and Pinto (2007:258) describe procurement as the process of acquiring services or products. It is the researcher's viewpoint that the word "works" was omitted by the aforementioned authors' in their description of procurement, because in the procurement milieu the word "works" is perceived to be similar to the word "service."

For this research, it was important to establish the concept of procurement. The participants in this research were requested to explain what their understanding of the concept procurement is. All the participants indicated that that procurement is the practice of identifying the need for a service and or product and then procuring the said services and or products from an external party. The positive responses to the concept of procurement laid a strong base for further questions of the research subject, as the participants are familiar with this subject.

Melton (2008:170) further indicates that the basic functions of the procurement department are:

- supplier identification and selection;
- market research for supply(iers);
- tendering and buying (creating purchase orders);
- negotiating and contracting, and
- supplier measurement and performance.

The procuring of products and services includes contract strategy, contract documentation and selecting a contractor. Procurement encompasses all members

of the supply chain,² including the individuals responsible for the operation and maintenance (Bower, 2003:1 and Turner, 2011:3). Procurement, according to Dominick and Lunney (2012:11), Mackie (2013:174) and Sollish and Semanik (2012:1) require the collective utilisation and management of good business practices that capitalise on value to the organisation through the attainment of commodities and services.

Applying good business practices in the procurement process will ensure that the correct material (or service) in the correct amount is delivered. It also sets out the measures to safeguard the relationships with the suppliers and that they are appropriately managed with the regular review of supplier performance and resolution of contractor issues (Westland, 2007:173).

Westland (2007:173) adds (from a project management perspective) that:

The procurement process is initiated after the procurement plan has been approved and the supplier contract signed. The procurement process is usually managed by a single resource within the project (such as a procurement officer or manager) and overseen by the project manager. Without a formal procurement process in place, it will be difficult to confirm that the products provided by the supplier are 'fit for purpose' and therefore meet the requirements outlined within the procurement plan. It will also be difficult to identify and manage supplier issues, and this will therefore increase the overall level of risk to the project. The procurement process is terminated only when the execution phase is complete.

Ribeiro (2009:27) and Turner (2011:3) states that purchasing or procurement is a unit in the organisation accountable for buying (procuring) goods and services which the organisation requires to conduct its prime business. The manner in which the procurement unit (department) performs its function, determines the efficiency and value add it has on the organisation's performance. From experience, the researcher concurs with the statements of the aforementioned authors.

The researcher's analysis of the literature of procurement revealed that certain actions take place to procure the goods, site works and or services need to complete

² "Supply Chain" is the movement of materials from their source (factory) to the end user and includes purchasing, manufacturing, warehousing, transportation and customer service. It comprises people, activities, information and resources involved in moving a product from the supplier to customer.

or maintain a project or business. These actions would seem to be in a methodical cycle called the procurement cycle, discussed below.

2.8 THE PROCUREMENT CYCLE

Arrowsmith, Linarelli and Wallace (2000:137) mention that the procurement cycle signifies the phases and events that occur in procurement through competitive tendering. According to Melton (2008:170), Panneerselvam and Senthilkumar (2009:241), Westland (2007:97) and Wiggins (2010:176) the phases during the procurement cycle comprise:

- **Phase one:** Obtain relevant information (it is information relating to the item that must be purchased or the services of a contractor which must be procured) and compile a tender document. In the tender document information of the specifics of the item or site works or services needed, will be detailed.
- **Phase two:** Send tendering documents to suppliers – after the specifics of the item or site works or services had been recorded in the tender document, it has to be forwarded by fax or e-mail to the prospective suppliers for pricing.
- **Phase three:** Site surveys conducted by suppliers – if needed, a site³ meeting may be held to provide an opportunity to the suppliers to view the site specifics needed.
- **Phase four:** Site visits by suppliers – these visits to assist the supplier to understand what the operating nature is and what the supplier will need to take into consideration when tendering.
- **Phase five:** Return of tender documents by suppliers – after the suppliers have completed the tendering documents, it is returned to the company who requested the tender.
- **Phase six:** Presentations by suppliers – the suppliers may also be awarded the opportunity to present to the company (in need of an item or service) how they would conclude on the item or service tendered.
- **Phase seven:** Evaluating and assessing of tender submissions by the company who requested the tender – a commercial and technical evaluation of the tenders

³ A site is the area of ground where the service of the contractor will be delivered.

submitted are conducted on the base pricing and the technical capability of the respective suppliers.

- **Phase eight:** Meetings to discuss evaluation or assessment – meetings are held with the various in-house stakeholders of the company that called for the tender. During these meetings the tenders received from the suppliers are discussed again taking into account the pricing and if the suppliers will deliver as stipulated in the tender document – technical capability.
- **Phase nine:** Appointing the successful tenderer – the announcement of the successful tenderer is done and the supplier is informed through post, e-mail and or fax.
- **Phase ten:** Commencement of new contract – a contract for the supply of an item or service, is initiated with the successful supplier.

Other authors have a different view of the procurement cycle in terms of the number of phases it comprises, referencing fewer phases as discussed.

Hobe, Hoffmannová and Wouters (2011:59) and Ribeiro (2009:28) vary from the above-mentioned authors of the phases in the procurement cycle associated with the procurement of goods or works. According to them, the procurement cycle consists out of the following phases:

- preparation of the tender documents;
- advertising for contractors and suppliers;
- receiving of tenders;
- opening of the tender documents and assessment of tender documents;
- preparation of tender assessment reports, and
- awarding of contract and signature.

It is the researcher's opinion that Melton (2008:170), Panneerselvam and Senthilkumar (2009:241), Westland (2007:97) and Wiggins (2010:176) depicts in more detail the phases in the procurement cycle, whereas Hobe et al. (2011:59), and Ribeiro (2009:28) does not concur with the following phases of the former authors: phases three, four, six and eight. It is the researcher's view that when the latter phases are not conducted, the tenderers are not afforded the opportunity to

familiarise themselves with the operational needs and expectations of the company requesting the tender.

Wiggins (2010:176) further elaborates on the mentioned phases and states that every phase is vital to obtain information and to test which contractor or supplier offers the best service or product to meet the specification or requirement.

The participants were requested to give their understanding of what the procurement cycle is. Most of the participants (N=13) concurred with the 10 phases of the procurement cycle as discussed above. In addition, six participants with more audit experience further added that slight differences might exist in an entity's specific policy or procedure of procurement due to a difference in business processes. It is important that more focus be directed to the tender phase in the procurement cycle as this is the in scope area of this research topic.

2.9 THE TENDER PHASE OF THE PROCUREMENT CYCLE

The tender phase of the procurement cycle refers to Phase number 7 as listed by Melton (2008:170) and Wiggins (2010:176) and Phase number 4 as listed by Hobe et al. (2011:59), and Ribeiro (2009:28), *supra*.

Chambers and Rand (2010:299) give a brief analysis in that the main aim of a tender is to ensure that the best contractor or supplier is selected for the services or supply of an item, taking into consideration economic, quality, stability and technical aspects.

The tender phase involves an entity offering a project to the market and asking for tenders from other entities interested in being part of a project, or part of the project. The entity wanting the project to be performed is the "grantor,"⁴ while the parties interested in performing the project and offering to do so under certain terms are the "tenderers" (Delmon, 2009:417).

Lewis (2012:1) and Nickson (2012:2) consider tendering can be described as a formal offer, duly made by one party to another, an offer made in writing by one

⁴ "Grantor" is the company/entity requesting the tender.

party to another with an inclusive rate⁵ or price or an order for the supply or purchase of goods and or services.

Bergemann (2015:112) and Powell (2012:72) further elaborate on the view of the above authors that a tender is a process where a company informs external service providers of a need for a service or item and request them formally making an offer of the mentioned requirement.

When tendering procedures are properly managed, it provides the tenderers and the public with confidence of the transparency of the procurement cycle (process): selecting tenderers, healthy competition amongst tenderers to obtain the best price, value for money. This will also ensure that every aspect of the contract (price, quality, time and risk) is discussed. Effective tendering procedures may also increase efficiency by providing information, creating avenues for communication and reducing time for the required procurement (Delmon, 2009:419).

Sayers (2002:22) is adamant that if no procedure for tendering exists, an opportunity for misinterpretation or worse, misrepresentation may exist. Delmon (2009:419) is of the view that tendering procedures need to be properly managed.

To align the tender phase with the act of misrepresentation in procurement fraud, the researcher opted to engage with the research participants of their view of when during the procurement cycle misrepresentation are made.

The participants indicated from their experience that misrepresentations (dealt with under the fraud section above) and alterations are normally made during the following phases in the procurement cycle explained in Table 2.1.

Table 2.1: Phases of the procurement cycle

Percentage of sample	Phase in Procurement cycle	Methods employed
25%	Receiving (phase 10)	Incorrect quantity and or quality received due to collusion between the contracting company and the receiving company.

⁵ An inclusive rate is a rate inclusive of expenses i.e. petrol, transport and/or labour costs etc. Therefore, no extra charges may be levied regarding these expenses.

Percentage of sample	Phase in Procurement cycle	Methods employed
1%	Vendor Approval ⁶	The Vendor approval process ⁷ by providing false BEE ⁸ certificates, VAT registrations, technical abilities and references. It is important to highlight that the literature study conducted did not mention the vendor approval process. ⁹
4%	Contract Award (phase 9)	Insufficient monitoring of rates invoiced by a vendor that may lead to over invoicing.
70%	Tender (phase 7)	“Rigging” a request for tender to favour a particular supplier, leaking of tender information, receiving late tenders, inconsistency in applying criteria for adjudication, collusion between tenderers and employees in the tender requesting company.

It is the researcher’s critical analysis from the responses of the research participants that procurement fraud is most likely to occur during the tender phase in the procurement cycle. The tender phase was examined and discussions were held with the participants having reviewed the responses, the method in conducting these misrepresentations will be explored further.

2.10 FRAUD DURING THE TENDER PHASE IN THE PROCUREMENT CYCLE

Vona (2011:179) is of the opinion that procurement fraud refers to the corrupting of the tender phase of the procurement cycle to ensure that a specific supplier is awarded the contract. Olsen (2010:111) adds that procurement fraud has been described as the least visible but yet the most common and costly category of fraud in industries.

Fraud during the tender phase is always worrying for management and auditors alike because it involves the risk of corruption as collusion takes place between internal and external parties. Various ways exist where contractors, employees and tenderers can commit fraud if companies do not have an appropriate counter fraud

⁶ Not referenced as a phase in the procurement cycle in this dissertation.

⁷ Vendor approval is the process of confirming that a company complies with legislative requirements and capacity before entering into business with it.

⁸ Black Economic Empowerment (BEE) is a racially selective programme which gives certain previously disadvantaged groups (Blacks, Coloureds, Indians) economic privileges, which includes measures such as employment preference, ownership, management and preferential procurement.

⁹ It is assumed that the authors in the literature study refer to already approved vendors.

and internal control assessment strategy in place (Button & Gee, 2013:11 and Vona, 2011:179). Gee (2015:243) adds to the views of the above authors and is of the opinion that corruption during the tender phase occurs where an employee colludes with a third party to obtain a benefit.

The perpetrator's intention in the commission of procurement fraud during the tender phase is to corruptly influence the decision process by favouring one party to the detriment of the awarding organisation and to the advantage of the individual corrupting the process, or the contractor or customer receiving the corrupt advantage. The awarding manager is influenced by a bribe or kickback (receiving of monetary gift to influence the decision who to award the tender) and awards the contract to the contractor (Gee, 2015:244-245 and Vona, 2008:178).

Cascarino (2013:18) adds that another method of procurement fraud during the tender phase comprises the cooperation between an employee working with a contractor to defraud the employer through the authorisation of bogus or fictional invoices, payment for services or products not supplied, or work never done.

Atkin and Brooks (2015:357), Gee (2015:245-246), Kranacher, Riley and Wells (2011:382-397), Olsen (2010:111), Samociuk and Iyer (2010:20), Special Investigation Unit Training Manual (2010:118), Stamler, Marschdorf and Possamai (2014:72), Vona (2011:185-189) and the majority of the participants in this research state that tendering is the point where the procurement cycle is at its weakest (see Table 2.1). Various methods are employed to commit procurement fraud during the tender phase such as:

2.10.1 Tender avoidance during the tender phase

The structuring of the procurement cycle to circumvent or avoid standard tender requirements so that only a particular contractor could be used. Other types of tender avoidance include:

- **Structured purchasing** – the process of issuing multiple purchase orders individually below the threshold level.

- **Split tenders** – the awarding of two tenderers a purchase order for the same product, but the tenderers in question are controlled by a common parent company.
- **Contract amendment** – awarding the contractor additional projects without following the competitive tendering process.
- **Sole source** – the process of procuring services and goods to a specific contractor without following the competitive tendering process.
- **Exigency purchase** – an order deemed as urgent to bypass the control threshold and competitive tendering procedures.

2.10.2 False statements during the tender stage

The creation of false tender documents and using non-existent or existing company names on tender documents.

2.10.3 Favouring of key control points

Establishing a need by submitting a purchase order at peak demand times or under exigency conditions to increase the probability of paying a higher price for goods and services. This also refers to design and or specification settings are specifically designed to favour a certain contractor over others, which include:

- **Vagueness or lack of clarity in specifications** which allows for a contractor to tender in a manner which appears to be cost effective while in fact the pricing is higher than the other tenderers.
- **Restrictive specifications** are communicated to favour a pre-selected contractor.

2.10.4 Tender exclusion

The identification of tenderers, whom can tender, then structuring of the tendering phase to exclude tenderers willing and able to submit competitive prices or including unqualified tenderers as an illusion of competitive tendering phase. Examples of tendering exclusions:

- excluding qualified suppliers by not including them on the tenderers' list;
- failure to distribute tender documents to tenderers;

- providing suppliers with false or misleading tender documents to discourage a contractor from tendering;
- limiting the search for qualified suppliers; and
- different tenderers contacted to provide the impression of a contractor search.

2.10.5 Contractor selection

The changing of procurement processing criteria, either the changing of the evaluation phase of tenderers for selection or the actual selection process.

2.10.6 Contractor evaluation criteria manipulation

Ways of manipulation include:

- the establishment of a certain contractor criterion to favour a pre-selected contractor;
- the establishment of a certain contractor criterion after tender opening;
- request for proposals has certain defects known to the favoured contractor;
- the preparation of specifications for the proposed tender by a contractor; and
- financial adjustments due to specification, after the fact.

2.10.7 Contractor selection process manipulation

Ways to manipulate include:

- the bypassing of the normal review process by a contractor;
- pricing information of other tenderers communicated with the favoured contractor;
- lost tenders or information – due to purchasing agent destroying a tenderers submission;
- the contractor selection criteria favour a specific contractor during the selection phase;
- after the tender opening, the contractual criteria are created or changed; and
- false statement of a contractor's assessment.

2.10.8 Management override

The intentional authorising by management regarding selecting a specific contractor which bypasses control procedures and may cause that the contractor is selected which did not have the best overall price.

2.10.9 Advanced communication of information

Provision of information to a contractor of the selection requirements by an employee to the detriment of other tenderers.

2.10.10 Contractor tender rigging

Involves the collusion of tenderers amongst themselves to determine who will be awarded the contract and at what price. The following are schemes falling under the veil of tender rigging:

- Unresponsive tenders from tenderers which provides the impression that competitive tendering took place.
- Tender suppression by another contractor by withdrawing their tenders or not tendering at all.
- Tender rotation whereby a preselected contractor provides the lowest tender on a rotating basis – tenderers collude to ensure that a high tender is received.
- Market division is an agreement between tenderers not to compete with each other in a designated geographic area.

Besides the views of the above authors, Hayton (2000), Olsen (2010:111), Samociuk and Iyer (2010:20), Special Investigation Unit Training Manual (2010:118) and Vona (2011:185-189) unanimously state that during the procurement cycle and in particular, the tender phase, fraud is committed by the way of misrepresentations and includes the following facets:

- Facts are misrepresented in the content of tendering documents submitted during the tender or tendering stage (the tenderer misrepresents its financial status), the ability to conclude the tendered work, incorrect plant or employee compliment.
- The factual nature in terms of the quality and quantity of the goods or services to be rendered is misrepresented.

- During the site, tender and or shortlist meetings, verbal misrepresentations are made.
- Deliberate non-disclosure of conflicts of interest; failure to perform on previous contracts, this information could cause the disqualification from the tender phase of the procurement cycle.
- Forged tax clearance certificates submitted, disguising the factual nature of the tenderer's tax status with the Receiver of Revenue.
- Purposefully not declaring or omitting to declare the degree and factual nature of any third party service benefactor or a subcontractor's involvement in the performance of the contract.
- Intentionally making excessive or duplicate payments for goods or services.

An analysis of the responses received from the participants of methods used to defraud during the tender stage suggest, that:

- 40% (N=10) of the sample indicated bid rigging (contract promised to one tenderer – collusion between employees in the tendering company and the company requesting the tender);
- 20% (N=5) of the sample specified the leaking of tender information to tenderers;
- 16% (N=4) of the sample identified bid splitting (big project split into small parts so that the monetary value of each is below the authorisation threshold);
- 12% (N=3) of the sample indicated bid rotating (collusion between tenderers in taking turns being the successful tenderer);
- 8% (N=2) of the sample could not provide any method of defrauding during the tender stage; and
- 4% (N=1) of the sample specified that a supplier may tender under different names to improve his chances of being awarded the tender.

The researcher is of the opinion that in terms of the figures above, bid rigging (40%) and the leaking of information (20%) may be paired together as the methods mentioned, relates to each other (collusion).

It is the opinion of the researcher that the majority of the sample (60%) indicates that collusion is the main method utilised for defrauding during the tender phase in the procurement cycle.

It was also noted that some of the participants at first confused the concepts of bid rigging and bid rotation, but after discussions (and taking into account the literature sources as per point 2.10), it was established (through posing questions to the participants) that the crux was that collusion between parties were involved. The difference was the notion that during bid rigging, collusion occurs between the tendering company and employees from the company requesting the tender. During bid rotation, collusion occurs between the different tendering companies to establish who will be the successful tenderer and more often than not, at inflated rates.

After analysing how fraud is committed during the tender phase in the procurement cycle, it is judicious to examine red flag indicators of procurement fraud. From experience, the researcher is of the opinion it is important to identify red flag indicators in advance because these indicators will assist to prevent and or investigate procurement fraud. The description of red flag indicators of procurement fraud will be addressed in the next point.

2.11 THE DESCRIPTION OF RED FLAG INDICATORS OF PROCUREMENT FRAUD

Walsh and Hemmens (2008:499) consider white-collar crime (including procurement fraud) can be viewed as the priciest financial crime. It is therefore crucial to identify and detect any sign of fraud at the soonest and act thereon. Magnuson (1992:100) mentioned it is prudent to conduct internal investigations before law enforcement agencies are informed of irregularities.

Cascarino (2013:188), Rezaee and Riley (2010:106), Vona (2008:15) and Walsh and Hemmens (2008:499) are of the view that red flag indicators are a common term associated with the identification of fraud and indicates that the potential exist for a fraud scheme to materialise. The observation of a red flag is the triggering mechanism, an indicator or warning that something is not right, that should lead to closer scrutiny to confirm the existence of fraud. The researcher is of the opinion in terms of the aforementioned literature that red flags may also be utilised to determine the scope when assessing internal controls.

The research participants were requested to describe the concept of red flags of procurement fraud during the tender phase in the procurement cycle. The majority

of the participants described red flags as warning signs and or trigger points of possible undue activity occurring, this view is based on actual occurrences in the past of fraud and or irregularities. One participant, with vast expertise in SOX controls, was of the opinion that if a red flag is present, it is not a confirmation of fraudulent or irregular activity, but rather an indication that preventative measures (implementation of controls and appraising internal controls) should be taken. One participant with more audit experience also stated that red flags are not actual events of fraud or irregularities but rather an identified risk that, if not treated or mitigated, may realise. Another participant with more investigation experience was of the opinion it is areas that might be open to fraudulent activities.

The following 12 points are listed by Du Plessis (2007), Kramer (2012), Piper (2012) and Zikmund (2010) as the red flags of procurement fraud:

- Recurring awards of contracts to the same supplier – the same supplier is awarded contracts on a continuing basis.
- Competitive supplier complaints and protests – contracting administrators of the company requesting the tender does not entertain grievances and objections of other tenderers.
- Criticisms about quality and quantity – frequent complaints by the company's end-users in terms of the contracting supplier's quality and quantity.
- Various contracts awarded to a specific supplier just below the competitive base price – the tendering price of the vendor regularly awarded contracts, is usually just below the viable base price.
- Irregular tender patterns - most suppliers' tender prices are high, and one is low, an obvious irregularity that may be due to pricing on poor quality.
- "Go-between" fees – the payment to a person in putting a tender together. This person, (may include an employee of the inquiring company) sometimes, can assist more than one tenderer that can cause tender information being shared and causing the tender phase in the procurement cycle not to be competitive.
- Debatable tenderer - vendors sometimes take advantage of an entities' trust and several tenderers secretly collude to take turns being the lowest tenderer and tender prices higher than the market value.

- Awards to non-lowest tenderer - tender evaluators intentionally decide early to which company the contract will be awarded, without considering the other tenderers prices (one of the tender evaluators may also have a conflict of interest with the company to whom the contract is awarded).
- Scope changes to the contract - additional work is added to the contract after it was awarded, unrelated to the initial inquiry.
- Various post-award contract orders – work is added after contract award to increase the contract value.
- Sole supplier – the market not sourced for competitive pricing due to a perceived emergency.
- Debatable minority ownership – companies’ owners indicating being of the minority group, but they are not. Black Economic Empowerment (BEE) companies are favoured during contract award, as it required that a company have a certain BEE spend. Fronting exists where a company indicates that it is a BEE compliant, but in fact, the “Black ownership” is non-existent and this fronting is used to obtain contracts.

Piper (2012) concurs with Zikmund (2010) adding the following is also red flags of procurement fraud:

- large gifts and entertainment expenses;
- round invoice amounts;
- copies of supporting documentation instead of originals;
- duplicate payments;
- sequential invoices paid;
- unusual (large or round-dollar) amounts paid;
- employee-vendor address match;
- multiple invoices paid on the same date; and
- slight variation of vendor names.

On an open-ended question to the participants to what they see as red flag indicators of fraud during the tender phase, it was noted similarities exist in terms of their responses and the literature used for this study. The researcher compared the responses to the literature study and removed the similar points. The data not similar in terms of literature and the responses from the participants are detailed below:

- the close association of employees with suppliers or companies (possible collusion) - declaration of conflicts of interest not conducted;
- regular failure to test the market for suppliers and prices;
- acceptance of late tenders;
- special specifications written by end users to ensure exclusion of certain suppliers;
- inadequate access control to tender box – only one person having the keys or tenders not secured after submission;
- only one supplier constantly tendering or submitting a quote;
- repetitive orders placed of a value just below the next authorisation level;
- lack of clear procurement procedures and policies;
- lack of segregation of duties within the procurement process;
- continuous management overrides;
- procurement staff not taking leave;
- omission of supporting documentation to invoices;
- verbal work instructions;
- work conducted out of contract scope; and
- stock counts, not conducted.

The researcher opted to divide (Charts 2.1 & 2.2 below) the listed responses into two sample demographics. The reason therefore was that during the interviews and on review of the participants' biographical information it was noted that some of the participants have more investigation experience than audit experience and vice versa, although doing the same kind of work. This division was also done to obtain a better understanding what is regarded as red flags from an investigation (fraud) and an audit perspective (internal controls).

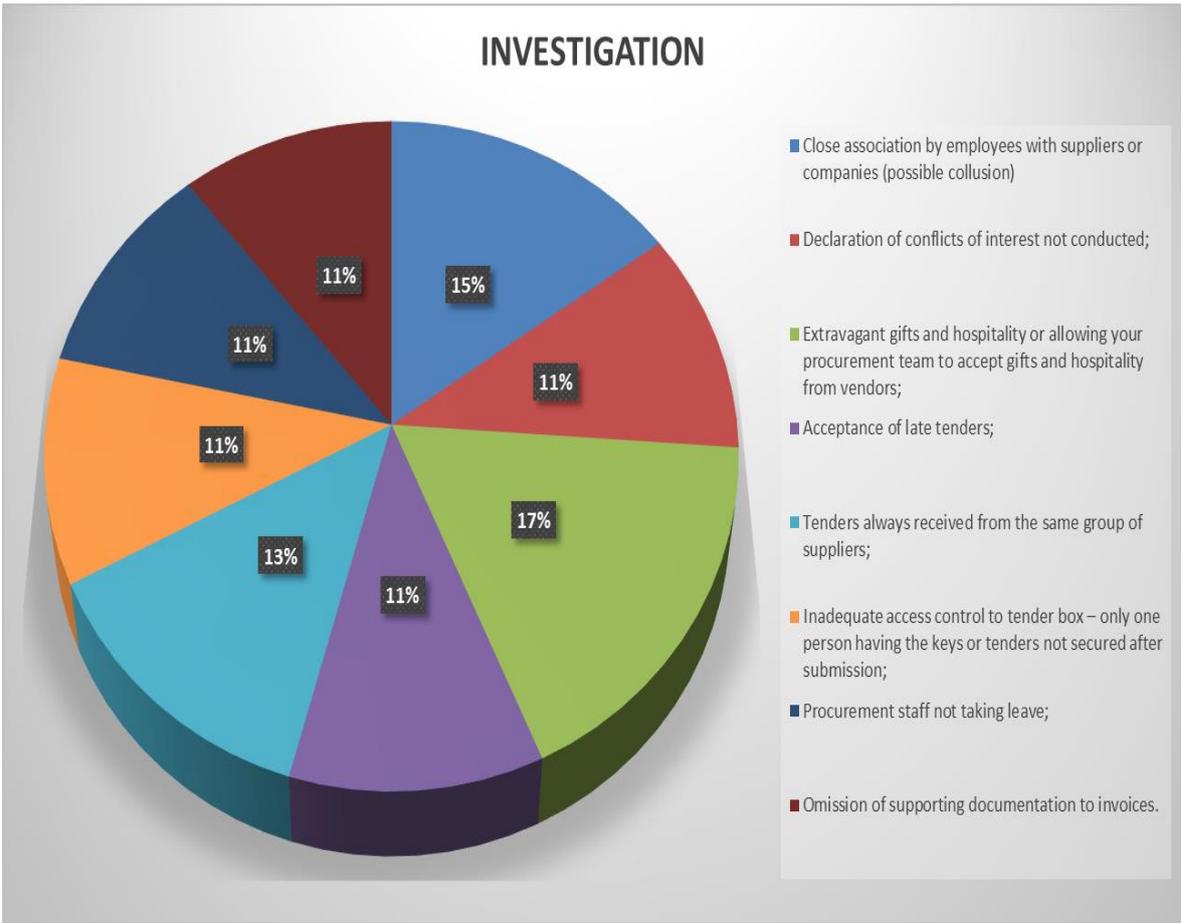


Chart 2.1: Investigation

The participants with more investigation experience regard the extravagant gifts from suppliers as the main red flag of procurement fraud and collusion during the tender phase.

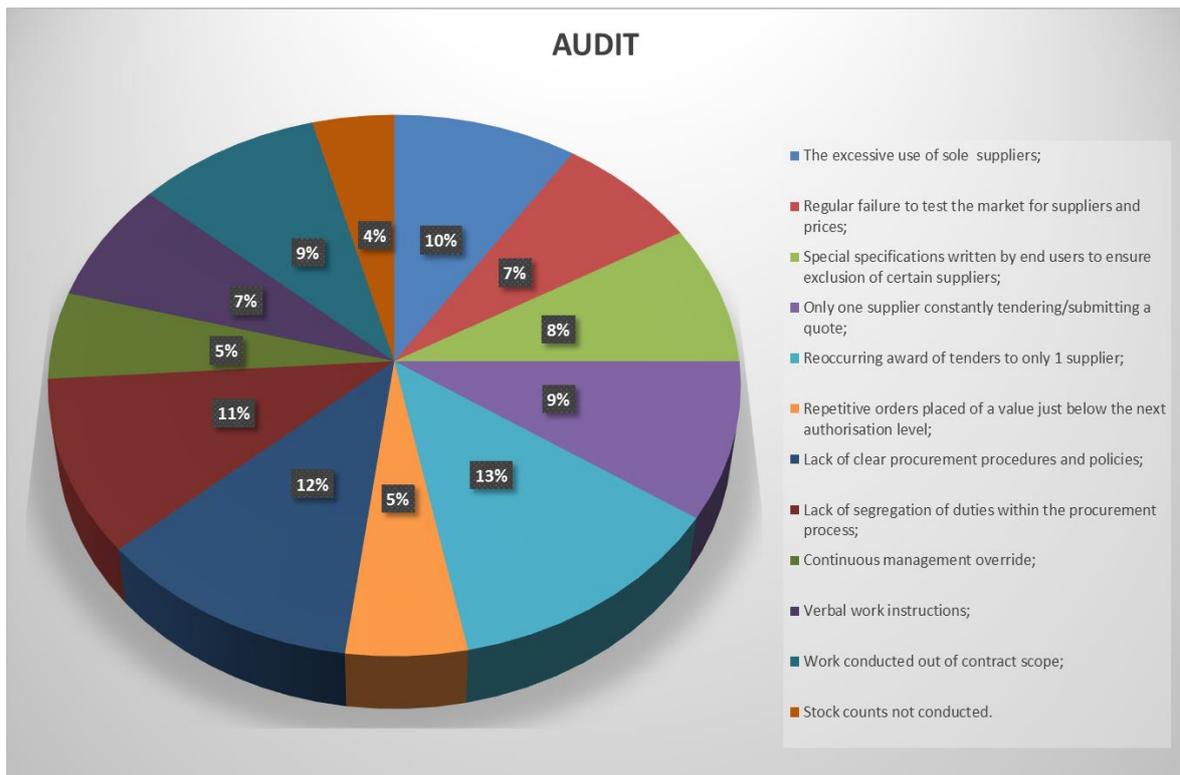


Chart 2.2: Audit

The majority of the participants with more audit experience were of the opinion reoccurring awards of tenders to one tenderer and the excessive use of sole suppliers were the main red flags of procurement fraud during the tender phase.

The researcher analysed the responses from the two groups and found there was a common denominator: the reoccurring award of tenders to a certain supplier. The researcher is of the opinion (to explain the reason for the difference in responses), the differences exist because the participants with more audit experience, mostly focus on administrative controls while the participants with more investigation experience are more inquisitive into occurrences out of the ordinary.

In light of the analysis conducted as per Chart 2.1 and 2.2, it is the researcher's view that central to the responses of both the mentioned groups, is the collusion factor between the tendering company and the employees of the tender requesting company. In light of the aforementioned view and data obtained from sources, it is the researcher's opinion that it is imperative to identify red flags that will indicate if possible collusion is taking place between individuals involved in the tender. These red flags will also assist in determining a scope for appraising internal controls that will be thoroughly examined in point 3.6 in Chapter 3.

2.12 SUMMARY

In this chapter, the meaning and facets of criminal and forensic investigation were examined. It was concluded the aforementioned concepts differ little from each other as both concepts have the goal to investigate crime and to present the truth before a court. To align criminal and forensic investigation to the illicit crime of procurement fraud, the elements of fraud was explored to obtain an understanding of this crime. The procurement process and in more detail, the tender phase in the procurement cycle was studied to align the crime of fraud to the procurement function. This study revealed procurement fraud can be committed in any of the several phases of the procurement cycle, but the biggest risk is during the tender phase. The researcher focused on the tender phase of this cycle, which revealed fraud takes on various forms and different methods exist to commit procurement fraud. Literature study and the retorts from participants would suggest that the act of misrepresentation is the most frequent fraud element present in the commission of procurement fraud during the tender phase.

It was evident the act of collusion between employee and contracting company plays an integral role in fraud during the tender phase. The theory of red flags was also scrutinised to attain an understanding how it will assist in identifying the commission of procurement fraud. It was learned from literature study and opinions from individuals investigating procurement fraud that multiple red flags of procurement fraud exist and that these red flags will assist in investigating and defining the scope for assessments of internal controls during the investigation of procurement fraud.

3. CHAPTER 3: THE CONTRIBUTION OF INTERNAL CONTROLS TO DETECT AND INVESTIGATE PROCUREMENT FRAUD DURING THE TENDER PHASE

3.1 INTRODUCTION

In chapter 2, facets of procurement, red flag indicators and fraud during the tender phase of the procurement cycle, were discussed. To elaborate on the latter and to bring the discussed aspects into context, internal controls in the procurement cycle to detect procurement fraud will be discussed during this chapter. Biegelman and Bartow (2012:94), Kass-Shraibman and Sampath (2011:299) and Vona (2008:1-2) is of the opinion, traditionally auditors relied on the evaluation of the adequacy and effectiveness of internal controls to detect and prevent fraud. The auditor would first document the internal controls and if deemed adequate, the controls would then be tested to ensure operating efficiency.

This chapter will further focus on important aspects of internal controls in procurement procedures to detect procurement fraud as a risk and to discuss the research question of internal controls to detect and investigate procurement fraud during the tender phase. Facets discussed comprise the concept of internal controls, the necessity of internal controls in the procurement process and an analysis of policies and procedures in business and risks associated if no policies and procedures are in place. To conclude the discussion, the necessity of regular assessment or audit of internal controls in procedures and policies, is reviewed.

3.2 THE CONCEPT AND IMPORTANCE OF INTERNAL CONTROLS

The researcher is of the opinion that before the concept of an internal control can be discussed, the theory of a risk(s) must first be highlighted. To align the statement of the researcher to literature, the following authors Collier and Agyei-Ampomah (2005:108), Concise Oxford English Dictionary (2008:1241), Gray and Manson (2008:212), Griffiths (2005:17) and Mortimer and Mortimer (2005:45) state a risk is any doubt about a future incident that might threaten an organisation's ability to accomplish its mission. It is the chance of something happening that will have a negative impact on the objectives of an organisation. Smuts and Smuts (1992:133) add to the aforementioned authors that a risk is a chance or danger connected to something; the possibility of damage or loss – a daring feat. Having highlighted the

theory behind a risk, the concept and importance of internal controls will be discussed further in this section.

Bologna and Shaw (1997:189), Manacorda, Centonze and Forti (2014:285) and Simkin, Norman and Rose (2014:395) reason companies face new responsibilities for the protection of assets and for reporting on the effectiveness of internal controls. Bologna and Shaw (1997:189) further state the General Accounting Office (GAO) and the Committee of Sponsoring Organisations (COSO) of the Treadway Commission have settled their differences over whether internal controls should cover just financial reporting or extend to controls related to safeguarding assets, which usually fall under operational controls. A broad consensus was reached on the COSO definition of internal control and on a framework that provides a standard against which entities can measure the effectiveness of their internal controls.

Albrecht, Albrecht, Albrecht and Zimbelman (2015:77), Bologna and Shaw (1997:190-191) and Giles (2012:20-21) mentioned it is believed that internal auditors have the specific responsibility for preventing and detecting fraud. They mentioned the role of auditors in anti-fraud work is sometimes poorly understood and rely on a traditional audit approach that is often ineffective to address fraud risks.

Bologna and Shaw (1997:192-193), Dormán, Görgényi and Horváth (2013:201), Hopwood, Leiner and Young (2012:50), Loughman and Sibery (2012:86), Miller and Bredeson (2010:110), Sollish and Semanik (2012:19-20), Turner and Weickgenannt (2009:100-101) and Vallabhaneni (2005:297) reason internal controls assist a company to accomplish specific goals or objectives. Internal controls are important because they aid to prevent and detect fraud. These controls are a key element of the Foreign Corrupt Practices Act (FCPA) and the Sarbanes-Oxley Act (SOX). The internal control process is so important for public companies that in terms of the FCPA and SOX, the Chief Financial Officer (CFO) and Chief Executive Officer (CEO) is held criminally liable for weak internal control processes. In a South African company context, the above-mentioned criminal liabilities are also applicable if the mentioned company is listed on a United States of America's Stock Exchange.

The researcher found during his research that SOX applies to all public companies in the USA and international companies that have registered equity or debt securities with the Securities and Exchange Commission, applicable to companies listed on the USA Stock Exchange (New York Stock Exchange). International mining companies such as AngloGold Ashanti is listed on the mentioned exchange and therefor SOX regulations apply to them.

Cascarino (2013:103), Hopwood et al. (2012:51), and Vallabhaneni (2005:296) further elaborate on the above authors' viewpoints by mentioning that internal controls are process oriented and therefore focus on the processes by which the company is run (managed) and not the outcome of such processes. They further add that internal controls comprise policies and procedures ensuring that goals and objectives are met, the effective utilisation of resources and that laws and regulations are complied with. Internal controls are structures of policies and procedures that protect assets, ensure precise and consistent financial reporting, and endorse compliance with laws and regulations and to achieve actual and proficient operations (*Internal Controls ...*, 2011).

From a fraud risk view Gottschalk (2010:33), Manning (2011:586) and McKinney (2015:569) are of the opinion a lack of internal controls, encourages fraud. Companies with ineffective internal controls are susceptible to fraud and therefore it is of paramount importance to establish controls to prevent and detect fraud that includes bribery, corruption and various other types of fraud such as procurement fraud. Investigations into fraud in the procurement domain, are difficult in the absence of internal controls or ineffective internal controls (*Bribery in ...*, 2007).

According to Lynford (2008:205), Rittenberg, Johnstone and Gramling (2011:141) and Vagadia (2014:73) certain risks are unique to a specific business entity, but that most risks can be managed and mitigated in an effective and specific system of internal controls. In the context of this research, fraud committed during the tender phase is seen as a risk. To mitigate this risk and to point out the importance of internal controls, these controls need to be sound and should contain key elements. The following are key control elements according to Graham (2008:28), (*Governance and Internal ...*, 2014) and Sollish and Semanik (2012:19-20):

- Clear policies, guidelines and procedures should be laid down for the company's various business functions. This will include policies and procedures such as staff administration and procurement of goods and or services.
- Checks and balances will ensure that important business processes performed by a single person, is verified.
- Proper record keeping of the activities carried out and the decisions made in the procurement department.
- Information security is essential to the well-being of a company and therefore information need to be classified as confidential or open information.
- Supervision by managers and or supervisors is invaluable. Conducting spot checks on the operations and business transactions is deemed to deter and detect irregularities.
- Feedback channels being user friendly and confidential (Whistleblowing line or Hotline), need to be established.
- Suspected fraud and corruption need to be reported to the authorities as soon as they are noted.

The researcher is of the opinion through his experience of Bullet number 5 and 6 above, that whistleblowing is a very important aspect in the internal control environment to address illicit acts and irregularities in business and therefore it needs to be highlighted. The definition of "whistleblowing" dictates that when an employee or former employee communicates information of a substantial ethical problem(s) to someone in a position to take action, and does this outside the sanctioned organisational channels. Particularly, whistleblowing usually occurs anonymously and it is encouraged by international organisations as common practise (Arszulowicz & Gasparski, 2011:84).

In terms of section 1 of the Protected Disclosure Act, the word disclosure (when taken into consideration of the whistleblowing context) means:

... any disclosure of information regarding any conduct of an employer or employee of that employer, made by any employee who has reason to believe that the information concerned shows or tends to show one or more of the following: (a) That a criminal offence has been committed, is being committed or is likely to be committed; (b) that a person has failed, is failing or is likely to fail to comply with any legal obligation to which that person is subject; (c) that a miscarriage of justice has occurred, is occurring or is likely to occur; (d) that the health or safety of an individual has been, is being or is likely to be endangered;

(e) that the environment has been, is being or is likely to be damaged; (f) unfair discrimination as contemplated in the Promotion of Equality and Prevention of Unfair Discrimination Act, 2000 (Act 4 of 2000); or (g) that any matter referred to in paragraphs (a) to (f) has been, is being or is likely to be deliberately concealed.

Lynford (2008:205) and Singleton, Singleton, Bologna and Lindquist (2006:89-90) elaborates on the view of Bologna and Shaw (1997:178) by stating the trademark of an effective internal control program is that it prevents and detects illicit acts and therefor due diligence are shown. Organisational due diligence includes:

- Established compliance standards and procedures in an organisation to be followed by its employees and agents.
- Oversight of these compliance standards and procedures should be assigned to senior management in the organisation.
- Due care must be practised to ensure that substantial discretionary authority is not assigned to individual's inclination to engage in illegal activities.
- Steps must have been taken to communicate the mentioned standards and procedures to all employees.
- Reasonable steps to achieve these standards should be taken by the organisation by utilising monitoring and auditing systems to detect criminal conduct by its employees and other agents.

These standards should be enforced through the appropriate disciplinary mechanisms of the companies and discipline the individuals responsible for the illicit act. This may include criminal litigation as recourse. After an offence and or transgression has been detected, reasonable steps should be taken to respond appropriately to prevent further offences of this nature. For internal controls to be effective, the objectives thereof should be achievable and therefore discussed further below.

3.2.1 Objectives of internal controls

The common objective of internal controls, according to Bologna and Shaw (1997:192), Collier and Agyei-Ampomah (2005:xxii), Hopwood et al. (2012:53), Hussain (2014:26), Rittenberg et al. (2011:195), and Spencer-Pickett (2011:102) is to reduce risk to an acceptable level. Van Daelen and van der Elst (2010:65) and Warren, Reeve and Duchac (2009:355) have the same viewpoint as the aforementioned authors, but their emphasis is on the assets of a business and

business information. According to them, the objective of internal controls is to provide assurance that:

- Business assets are safeguarded;
- Business information is precise: and
- Laws and regulations are complied with.

In conjunction with the views of Bologna and Shaw (1997:192), Collier and Agyei-Ampomah (2005:xxii), Hopwood et al. (2012:53), Hussain (2014:26), Spencer-Pickett (2011:102) and Warren et al. (2009:355), Ainapure and Ainapure (2009:229) state from an efficient business viewpoint that the following aspects are objectives of internal controls:

- ensure the orderly and efficient conduct of business;
- prevent and detect fraud; and
- ensure the timely preparation of financial information (year-end accounts).

3.2.1.1 Attainment of the objectives of internal controls

In achieving the objectives of internal controls, Bologna and Shaw (1997:192), Collier and Agyei-Ampomah (2005:xxii), Hopwood et al. (2012:53), Hussain (2014:26), Spencer-Pickett (2011:102) and Warren et al. (2009:355), suggest that a series or combination of fixed and constricted procedures are put in place to minimise risks. The reliability and integrity of financial reporting are confirmed as not to be disputed. These objectives can further be achieved by assuring compliance with the contractual stipulations. To promote tactical, strategic and operational efficiency to the maximum, will contribute to minimising risks in business. The corporate culture of the business also needs to be kept in mind when the objectives of internal controls are formulated with the goal of minimising risks to the business.

Integrating the concept of corporate culture with the objectives of internal controls, this concept needs to be explained. According to Pfister (2009:3), a corporate culture is demarcated as the principles and actions in which company employees and management cooperate and conduct business with outside companies, including the dress code of the company, office arrangements, business hours kept and the manner in which clients are treated (*Corporate Culture ...*, 2016).

To accomplish the objectives of internal controls, Shoemaker and Conklin (2012:144) are of the opinion since all processes originate from a policy, it must first be confirmed that general policies and procedures are defined and documented in a secure procurement process. These policies and procedures create and uphold a formal set of practical and behavioural controls over the procurement process. Procurement policies and procedures must provide the framework and guidance for procurement officials to do their work in a way that the procurement process is not exploited for personal gain (Larmour and Wolanin, 2013:xxi).

The participants in this research were requested to elaborate on their understanding of the concept of internal controls. The response of seven participants with more audit experience was that internal controls are processes and procedures implemented by management to prevent a risk from materialising. One participant with more investigation experience added that internal controls are put into place to mitigate fraud. Three participants with more audit experience added that internal controls target risk areas and are used to manage and mitigate risks.

In terms of the aforementioned responses, the researcher's conclusion is that the objective of internal controls is to mitigate a risk including the risk of fraud. The support that internal controls provide to manage, mitigate and prevent procurement fraud will be further addressed.

3.3 THE ASSISTANCE OF INTERNAL CONTROLS TO PREVENT PROCUREMENT FRAUD

According to Cascarino (2013:102), Dawson (2015:89-90) and Guess and Farnham (2011:115) well defined internal controls are required to ensure and to contribute in the execution of projects and procurement. The mentioned authors also argue that internal controls will support the agreements previously made by the different parties in the procurement process. This means that effective internal controls will guarantee that procedures are adhered to and closely followed. According to Lynford (2008:205) internal controls will ensure that the processes, controls and procedures needed to detect and identify procurement fraud, are followed and therefore reduce the fraud risk.

The purpose of reviewing internal controls, according to Bologna and Shaw (1997:196), Collier and Agyei-Ampomah (2005:103) and Cowan (2005:60-61) are to assist regulators, the board of directors and contract officers in the evaluation of management's statements. Stamler et al. (2014:71-72), and Vona (2008:1) elaborates that auditors have historically had two methods to deal with procurement fraud. Firstly, auditors would search for fraud within the procurement process by testing internal controls to identify red flags of fraud and secondly, to react to allegations of procurement fraud during the procurement process received through the "anonymous tip-off line."

According to Hussain (2014:26) and Spencer-Pickett (2010:520) internal controls are only effective in its assistance to help detect procurement fraud, if regularly reviewed and updated in terms of the fraud risks, taking into account the changing business circumstances. Failure of internal controls is only part of the process concerning fraud in companies. According to Hussain (2014:26) and Spencer-Pickett (2010:520) there is no universal fail proof internal control system against fraud.

Goldmann (2010:201) state the effective and essential employment and monitoring of sound internal controls assist in ensuring that businesses meets their objectives by providing professional services to the community, while utilising resources efficiently and minimising the risk of fraud, mismanagement or error (*Internal Controls ...*, 2011).

For Atkin and Brooks (2015:356), Cascarino (2013:103) and Padgett (2015:84) the levels of authority in decision-making are very important. They suggest specific attention should be given to authority levels in decision making during the procurement process. This, will according to these authors, assist in detecting procurement fraud. They reason authority levels correctly structured will assist and ensure competency of supervision. If supervision is conducted during the procurement process from the start to finish, it will add and assist to the adequacy of the administration and management of procurement. This will have a positive effect on the procurement process.

By the views of the above authors, it has been perceived that companies have effective accounting controls in place, but procurement fraud is ignored as being seen as “off-the-books,” fraud not reflected in the accounting records. A methodology is demanded, both proactive and reactive to address and assist to detect the unique fraud risks in procurement (*Procurement Fraud and Corruption*, 2012).

The participants in this research study were requested to provide insight in terms of their experience regarding the role and effectiveness of internal controls preventing procurement fraud. The overwhelming view from all the participants was that effective and efficient internal controls would assist in preventing procurement fraud. One senior participant with more audit expertise elaborated that internal controls are only a tool and that if the internal controls are not managed correctly, fraud will occur. In addition to this view, three participants with more audit experience indicated that internal controls might well be seen as a deterrent for fraud practices.

The researcher’s view is that in terms of the responses obtained from the research participants and the literature study conducted, internal controls are very important in preventing fraud and, secondly it may well be seen as a deterrent for would be fraudsters. In light of the previous discussion concerning the assistance of internal controls to detect procurement fraud, the necessity, the reasons and purpose of such controls also need to be investigated.

3.3.1 The purpose of internal controls in the procurement cycle

According to Basu (2006:41) and Bologna and Shaw (1997:196) auditors are being engaged to conduct audits of an organisation's compliance with various laws and regulations. The mentioned audits are being sought by the organisation to satisfy the regulatory agency and stakeholders that the organisation complies with applicable law.

3.3.1.1 Law and internal controls

Hall (2011:10-11) and Stimson (2012:100-101) elaborate on the importance of a suitable and manageable internal control system by stating managing an organisation is required by law to institute and maintain an adequate internal control system. In light of the statements of the aforementioned authors, there is an onus

on a company to report occurrences of procurement fraud to the authorities if the value of the fraud is over the threshold of R100 000.00 as prescribed in section 34(1) (a) (b) of the Prevention and Combating of Corrupt Activities Act. When there is a breakdown in the internal controls, the possibility of internal control inhibitors exists, which can advance and create opportunities for fraud and or corruption.

According to Hall (2011:10-11) and Lynford (2008:205) part of the responsibilities the law requires to prevent malpractices, is that management should assess whether appropriate internal controls have been implemented in any areas they have identified as posing a higher risk of fraudulent activity. These responsibilities are requirements for good governance and are essential to prevent any crime, especially fraud in business (*Governance and Internal ...*, 2014).

In light of the relevance of law and internal controls as discussed, the factors influencing the effectiveness of internal controls are examined in the next point.

3.3.2 Factors influencing the effectiveness of internal controls

From the literature study, the researcher could determine three factors having an influence on the effectiveness of internal controls. These factors are the occurrence of fraud, the absence and manipulation of internal controls. In addition, Giles (2012:26) and Pfister (2009:5-6) are of the opinion there are two central questions about internal controls that directors and managers need to ask and address. The first question relates to the design effectiveness of the controls taking into consideration that the higher the risk, the more robust and durable the controls must be. The second question is concerned with the effective working of the controls in terms of the initial design. The researcher knows from experience that merely because a control or procedure is recorded in a manual or policy, it does not mean it will be carried out in practise.

To add to above authors' view and that of the researcher, Loughran (2010:77) and Stamler et al. (2014:257), reasoned that weaknesses in the internal control system are strongly associated with the occurrence of fraud. The best internal controls are ineffective if employees do not follow and adhere to it. If management enforces internal controls and these controls are regularly updated, the business' internal control structure is more likely to be solid preventing the occurrence of fraud.

To bring internal controls into context with procurement fraud, Graham (2008:206-207), Pedneault, Rudewicz and Silverstone and Sheetz (2012:99) state that effective internal controls ensure that procurement transactions and processes are conducted only with the appropriate authorisation, accurately recorded. The effectiveness of internal controls becomes a concern when effective internal controls are absent or vulnerable to manipulation. It is promoted that good internal controls therefore will discourage and identify fraud and error and minimise the exposure to risks by reducing the chance of unexpected events (*Internal Controls ...*, 2011).

All the participants in this research study were of the opinion that internal controls are a necessity and critical in the procurement cycle as it would ensure that adequate policies and procedure exist, governing the processes in the procurement cycle. The participants listed the following motives for their response:

- Without the proper policies and procedures, the segregation of duties of employees may be compromised which may lead to collusion.
- Sound governance policies such as Conflict of Interest, Code of Business Ethics and Conduct, Delegation of Authority, approved BEE policies and guidance, are seen as internal controls and are necessary to ensure Ethical business practises and the deterrence of fraud acts.
- Proper systems (how the process within the procurement cycle is to be conducted) will allow for audit trails (evidence) for review and investigation.

Based on these responses, the researcher's opinion are categorical reasons (as stipulated above) motivating internal controls need to be part of the procurement cycle. After establishing the reasons for internal controls in the procurement cycle, the researcher will in the following discussion, scrutinize appraising internal controls to identify possible fraud risks within the procurement cycle.

3.4 ASSESSMENT OF INTERNAL CONTROLS TO IDENTIFY FRAUD RISKS WITHIN THE PROCUREMENT CYCLE

According to Biegelman and Bartow (2012:97) and Bologna and Shaw (1997:177-178), a compliance program (the appraising of internal controls) is a program designed, employed and is compulsory to prevent and identify fraud risks. Bologna and Shaw (1997:192), Graham (2015:2) and Warren, Reeve and Duchac

(2014:322) also mention the guidance provided in the Internal Control Integrated Framework report¹⁰ (drafted after the Treadway Commission's¹¹ recommendations) is designed to provide a common classification and explanation of internal controls and to create a standard by which the system of internal controls can be assessed by companies. Before addressing the appraising internal controls, it is important to focus on the components of an internal control system.

3.4.1 The components of an internal control system

According to Bologna and Shaw (1997:192), Graham (2015:3), Pedneault et al. (2012:99), and Warren et al. (2014:322-323), there must be five related components present and operational to have an effective internal control system. These authors indicate that:

- A good internal control environment comprises of employees with integrity, ethical values and competence and management with good philosophy and operating methods. How management delegates authority and responsibility, also organising and developing employees and the attention and direction provided by the board of directors, contributes to an effective control environment;
- The identification and analysis of relevant risks to achieve objectives which forms the basis for determining how the risks should be managed, is called Risk Assessment and an important component of an effective control environment;
- Control activities in an effective control environment consist out of policies and procedures that ensure management instructions are complied with. These activities include approvals, authorisations, verifications, reconciliations, review of operating performance, security of assets and segregation of duties;

¹⁰ Produced after the release of the Treadway Commission's recommendations, this document provides principles-based guidance for designing and implementing effective internal controls.

¹¹ The Committee of Sponsoring Organisations of the Treadway Commission (COSO) is a joint initiative of five private sector organisations, established in the United States, dedicated to providing thought leadership to executive management and governance entities on critical aspects of organisational governance, business ethics, internal control, enterprise risk management, fraud, and financial reporting.

- Good information and communication of data, including information about external events and clear communication from management is necessary to ensure an effective control environment exists, and
- The last component of an effective control environment is concerned with monitoring, the process that evaluates the quality of the internal control system's performance over a period.

After addressing the components of an internal control system, it is important to review the aims of this system.

3.4.2 Aims of internal controls

According to Cendrowski, Petro and Martin (2007:136), Dawson (2015:49-50), Franzel (2011:3) and Hall (2011:17) the aim of appraising internal controls is to confirm the efficiency of the internal control structure. Precautionary and preventative internal controls use a passive technique as a procedure that dictates the control to be adhered to. This passive technique is designed to reduce the frequency of the occurrence of fraud risks. Internal controls force compliance with desired or prescribed actions and point out non-standard events. Detecting problems are the second aim in assessing internal controls. Detecting controls are devices, techniques and procedures intended to identify fraud risks and events. The third aim of internal controls is instituting corrective controls being devices, techniques and procedures intended to rectify fraud risks and events.

Collier and Agyei-Ampomah (2005:124), Johnstone, Gramling and Rittenberg (2014:171) and Pedneault et al. (2012:99), argue that a well-designed and effective assessment system of internal controls is the most effective measure to prevent fraud risks. Internal controls are part of the protective system against fraud risks within a company. These controls are aimed to prevent unallowable activity and transactions and to warrant early detection. Fraud is a more common occurrence than most organisations would believe that could have various effects on an organisation. Fraud is about opportunity and if there are no internal controls in place to limit the risk of fraud, the temptation is easily formed. This exposes an organisation to a greater chance of fraud risks (*Internal Controls ...*, 2011).

To affirm the aims of an effective control system and to use a more cost effective approach to detect procurement fraud as a risk, Johnstone et al. (2014:76-77), Olsen (2010:119) and Vallabhaneni (2005:296) believe appraising internal controls constitutes the following:

- identifying of internal control objectives (policies) management designed to ensure compliance;
- identifying key internal control procedures management set to achieve objectives;
- testing internal control procedures; and
- identifying needed follow-up actions.

To obtain a holistic picture of an internal control system, factors that have limitations on the effectiveness of the said system, is explored below.

3.4.3 Contributing factors in the limitation of the effectiveness of internal controls

Johnstone et al. (2014:76-77), Pfister (2009:5-6), Turner and Weickgenannt (2009:101) and Vallabhaneni (2005:297) argue it is not possible for internal controls to provide absolute assurance that fraud risks would be mitigated and diminished. According to the aforementioned authors, inherent limitations in internal controls exist and can be attributed to the following factors:

- Inconsistent judgments during decision making of business objectives;
- Human error occurs in an organisation, example: typing or calculation error;
- Internal controls are circumvented or ignored;
- Controls may not be cost beneficial as the implementation of the control may be costly;
- Employee collusion with suppliers in arranging money for preferential treatment during the placing of orders;
- Management override of controls occurs, when a decision is made and followed through in contradiction with set out policies and procedures, and
- Incorrect application of control procedures, for example: The policy on procurement dictates a tender should be called if procuring of goods or services exceeds R20,000.00. The order is then split into two or three to ensure the order

amount does not exceed the mentioned limit and therefore no tender is called. The buyer can then place the order on any supplier as he or she is within the bounds of the mentioned policy. To align internal controls to this study, effective internal controls in the procurement cycle are discussed below.

3.5 EFFECTIVE INTERNAL CONTROLS IN THE PROCUREMENT CYCLE

Dinapoli (2010) is of the opinion, having effective and well-designed internal controls in place for procurement, safeguards against the misappropriation of funds. Internal controls in the procurement cycle ensure unallowable purchases are prevented. This will ensure fair and open competition in the purchase environment and cost-effectiveness in the procurement cycle. Dinapoli (2010), Olsen (2010:119) and Pedneault et al. (2012:99), list the following as internal controls and their aims in the procurement cycle which is detailed in Table 3.1 below:

Table 3.1: Internal controls and their aims in the procurement cycle

Internal Control	Aim
Clear lines of authority for approving purchases (before they occur) should be established.	To ensure the approval is obtained and the costs to be incurred have been evaluated.
Before authorising a major purchase, the availability of budget appropriations should be verified.	To verify the availability of funds and that the budget is not exceeded.
The approval to purchase goods or services should be approved by personnel other than the employee requesting the purchase.	The aim of this control is to ensure the approval function is segregated to reduce the opportunity to commit fraudulent transactions/acts.
All purchasing documents (such as requisitions and purchase orders) should be designed to include specific details about the items or services to be purchased.	The aim of this control is to ensure a proper audit trail exists in terms of the purchasing process from start to finish.
All purchasing documents should be sequentially numbered.	This control is to allow for tracking of orders.
Purchasing documents should have multiple copies so the receiving and accounts payable departments can be notified of the purchase of goods and services.	This control is to facilitate communication about the purchases and expected arrival dates of items or services procured.
Before the close of the fiscal year, a review of all outstanding orders should be conducted to determine if funds designated, should be continued, adjusted or cancelled.	To ensure the goods or services which have been ordered are received. Further, that the funds that were allocated to the purchase and which may not be settled, are identified. If this is not done, it may cause incorrect financial reporting.

Internal Control	Aim
When goods are delivered, the receiving or packaging slips should be verified against the items delivered in terms of the quantity, type, and condition of the goods received.	To ensure verification of the accuracy of the receiving slips to both: the actual goods received and to the requisition or purchase order. This will further ensure that payment will only be made for quantities ordered and received in satisfactory condition.

In Table 3.1, the internal control and the aim of the control was pointed out therefore it will be sensible to introduce the following viewpoint mentioned in (*Internal Controls ...*, 2011) in light of the facts mentioned in Table 3.1:

One of the most serious threats to the success of any organisation is fraud. Misplaced trust, inadequate hiring and supervision policies, and a failure to implement strong internal controls can lead to an environment ripe for internal theft and fraud. The most important aspect to managing this risk is ensuring that the organisation has solid internal controls in place.

Internal controls play a very important role during the tender phase and therefore the appraising of these controls, is very important and discussed below.

3.6 APPRAISING INTERNAL CONTROLS - THE TENDER PHASE

Wiggins (2010:176) described and explained the tender phase in the procurement cycle and referred to it as phase seven. He described this phase as the evaluating and assessing of the tender of a prospective supplier and mentioned that a commercial and technical evaluation of the tenders submitted are conducted on the base pricing and the technical capability of the respective suppliers. Although various other phases exist in the procurement cycle, the researcher will only focus on the appraising of internal controls in the tender phase. This, to address the research question concerned with the internal controls to detect and investigate procurement fraud during the tender phase.

Internal controls regarding the awarding of contracts may be strong, weak or even non-existent. The overall objective of appraising internal controls in the tender phase is to ensure the attainment of the most appropriate quality and quantity of goods and services for the lowest overall cost (Casarino, 2013:95).

According to Dinapoli (2010), Giles (2012:51), Jones (2004:72-75) and Stamler et al. (2014:257), the following internal controls during the tender phase in the procurement cycle need to be assessed:

- Assess if the minimum purchase value was set for which a tender process needed to be initiated for example all purchases over a R100,000.00 a tender process should be followed. The aim and rationale of this control is to ensure competitive tendering and honest competition so quality commodities and services are obtained at the lowest possible price. It therefore needs to be assessed if a competitive tendering process was followed that also safeguards against favouritism, extravagance and fraud, while allowing interested vendors a fair and equal opportunity to compete.
- Assess and confirm if the entity¹² adopted its own policies and procedures for procuring of goods and services stipulating purchases not required to undergo the tendering process. The aim of this control and the reason for it's need, to be assessed, is to ensure that competition is sought in a reasonable and cost-effective manner for procurements below the tender thresholds.

A combination of fourteen of the research participants' answers indicated on the question relating to the need for assessing internal controls during the tender phase, that internal controls have to be assessed to identify possible fraud risks during the tender phase. Four senior participants with more audit expertise were of the view appraising internal controls will provide an opinion on the adequacy and effectiveness thereof. They further indicated that this assessment will highlight any loopholes and deficiency with the internal controls, which opens the tender process to possible fraud.

Dawson (2015:89-90), Doody (2008), Ingram and Hall (2014), (*Governance and Internal ...*, 2014), Guess and Farnham (2011:115), Shackell, Ingram and Hall (2014) and Stamler et al. (2014:257), argue the undermentioned internal controls need to be assessed to ensure and warrant an effective internal control system during the tender phase in the procurement cycle. Assess the internal controls to verify if:

- A tender panel (comprising members from the user department, procurement department and any specialist or technical department) to pre-determine the assessment criteria and select the supplier or service provider, was formed.

¹² A business or organisation is sometimes referred to as an entity.

- Suppliers were invited to tender by a newspaper advertisement and if the tender invitation included the product, item or service specifications to be supplied or rendered.
- All tenderers were given the same information and confirm if a briefing was given to all interested tenderers shortly after tender invitation.
- Proposals were submitted in duplicate and in sealed envelopes.
- The tenders were safeguarded before the closing time (or with password control if they are submitted electronically), pending assessment by a panel.
- At least two staff members were present to open the tenders immediately after the closing time, and that duplicate copies of the tenders for future verification were kept – the same rule applies for electronic tendering.

Besides the internal controls to be assessed as discussed above, it is also necessary to verify if late tenders (as a rule must not be accepted) was accepted and that approval of the panel or the approving authority with justification, was obtained (*Governance and Internal ...*, 2014).

From an administrative and contractual viewpoint Chambers and Rand (2010:299-302), Guess and Farnham (2011:113-114) and Shackell et al. (2014), argue the following internal controls during the tender phase in the procurement cycle should also be assessed:

- It should be verified if the “right to audit” clause was stipulated in the negotiated contracts.
- The assessment ought to confirm whether suppliers and staff were fully aware of the organisation’s (with which they are entering a contract) policies on code of conduct, gifts and entertaining, and conflicts of interest.
- Assessment must also determine if clear authorisation levels for the procuring of goods and services, were adhered to.
- Evaluate if prospective suppliers were vetted.
- The assessment ought to examine that appropriate segregation of duties between the maintenance of supplier master file data,¹³ authorisation of

¹³ The supplier master data file comprises all the details concerning a supplier such as the supplier name, VAT number, banking details, physical address etc.

purchases, invoice processing, the payment of invoices, accounting and bank reconciliation processes occurred.

Doody (2008) and Guile (2015) concentrates more on the directorial aspects of internal controls and therefore the following administrative points need to be assessed:

- is there a tender procedure in place regulating the process and is this process followed;
- review the tender lists to confirm that no evidence of benefaction relationships between the tenderers, exist;
- confirm if companies persistently failing to tender, were excluded from the tender lists;
- assess if excessive use of single sources occurs, that rules out competitive tender action;
- establish if the tender board was advised of the signs that would suggest tender rigging; and
- validate if the contract makes commercial sense.

After appraising internal controls to identify fraud risks within the tender phase of the procurement cycle, the necessity of regular assessments of internal controls recorded in policies and procedures need to be addressed. This will be explored in the next section.

3.7 THE NECESSITY OF REGULAR ASSESSMENT OF INTERNAL CONTROLS

Bologna and Shaw (1997:184), Harrison and St. John (2014:165) and Needles, Powers and Crosson (2014:303) argue the necessity of regular assessment of internal control policies, by stating that precautions must be taken by an institution through monitoring and auditing systems to detect criminal conduct and irregularities to non-compliance of policies and procedures by its employees and stakeholders. The researcher is in agreement with these authors, but has learned through experience that organisational entities perform sporadic audits to confirm that management and staff are following the organisational procedures and policies, by implication – it is the verification if internal controls are adhered to.

The essence and necessity of regular assessments of internal controls are inseparable from an organisation's management and this includes rules, procedures, practical methods and is part of the organisational structure (Dormán et al., 2013:201, Kass-Shraibman & Sampath, 2011:299-301 and Weygandt, Kimmel & Kieso, 2010:308-309). In addition, appraising internal controls creates a controlled environment that will enhance the implementing of policies and procedures (*Internal Controls ...*, 2011).

Hightower (2009:52) and Vona (2008:11) in their discussion regarding the necessity of regular assessment have a more aggressive approach. Their views are that management must be vigilant and distinguish between the documentation concerned with an internal control and the internal control itself. According to them, the mere drafting of a document describing the internal control is not the control. The internal control must form part of the process utilised by people to perform in accordance with the documented policies and procedures. Business transactions may indicate that an internal control is functioning, but if the employee is not performing the control procedure in conjunction with the control guidelines, the internal controls do not function as intended by management.

The aggressive viewpoint of Hightower (2009:52) and Vona (2008:11) is envisaged by stating that when individuals use their positions of authority to override controls, it may well cause crime, irregularities and transgressions that cannot be tolerated.

It is essential that an organisation must have organisational assessment policies and procedures. According to Albrecht et al. (2015:147), Biegelman and Bartow (2012:97) and Shah (2007:199), the lack thereof may cause problems such as:

- unethical, uneconomic, inefficient, and ineffective business operations;
- weak accountability of the responsible people in the case of the occurrence of irregularities;
- unlawful actions; and
- the lack of safeguarding measures against exploitation, maladministration, mistakes, fraud, and indiscretions in business processes.

Twelve of the participants indicated with a question regarding the necessity of regular assessment of internal controls, that it is of paramount importance that regular assessments of internal controls in the tender process are conducted. The following points were listed as reasons regular assessments need to be conducted:

- To ensure that the tender controls are still operating as intended and have not been circumvented.
- To identify areas exposed to risks, areas where inefficiencies could be removed and identify areas where best practices could be implemented to enhance the tender process.
- To confirm any changes within the control environment during the tender phase and ensure the controls are still adequate.

After internal controls have been established, the efficiency of these controls needs to be monitored to confirm the aims of the controls are being achieved. As part of the regular assessment of internal controls, continued monitoring actions need to be conducted that include oversight by management and supervisors that examine and expand the design, performance and efficiency of these internal controls. Appraising internal controls is used to monitor the performance of these controls (*Internal Controls ...*, 2011).

3.8 SUMMARY

In this chapter, the theory behind risk was examined and concluded on the understanding it is an occurrence influencing the potential for an entity to reach its goals and objectives. The concept and objectives of internal controls in relation to the risk component in procurement and more specifically the tender phase were explored. It was noted the most prominent feature of an internal control is to mitigate (prevent) a risk and in specific reference to the risk of fraud during the tender phase. Throughout the literature study and interviews, it also became evident that internal controls are not only a concept of good business but is regulated by law in terms of SOX and the FCPA. The lack of and or weak internal controls in procurement (and clearly) in business processes, may lead to various illicit acts, including but not limited to fraud during the tender phase. Taking the aforementioned into consideration, the importance and necessity to assess internal controls to ensure the risk of fraud is mitigated, was emphasised.

4. CHAPTER 4: FINDINGS AND RECOMMENDATIONS

4.1 INTRODUCTION

Procurement fraud and in specific reference to this study, procurement fraud during the tender phase in the procurement cycle, has a momentous negative impact on business entities, not only in South Africa but worldwide. This research commenced due to a need identified and to increase the knowledge of the audit-investigation fraternity at AGA in assessing internal controls during the tender phase to identify the occurrence of fraud.

The researcher discovered how the human factor in terms of collusion and the act of misrepresentation, contributes in a commission of a crime. The knowledge and understanding, the experience in human nature and the identification of signs of possible illicit acts, will assist in the investigation of procurement fraud during the tender phase.

The researcher launched this study to research further a problem identified in his work environment by addressing what procurement fraud entails and to ascertain if internal controls contribute to the detection and investigation of procurement fraud during the tender phase in the procurement cycle. The aims of this research were addressed by employing national and international literature, World Wide Web resources and by interviewing participants from audit-investigation fraternity at AGA who is familiar with procurement.

The research questions were divided into key concepts to address the research aims and the research questions of this study. The findings noted during this research and the recommendations concerned, are detailed below.

4.2 FINDINGS

The researcher attained primary and secondary findings, based on the formulated research questions to address the aims of this research. Recommendations were made, based on the primary and secondary findings. The most prominent finding of this research is the act of collusion between employees of a tendering company and the employees of the company requesting the tender. Further primary findings are detailed below.

4.2.1 Primary findings

4.2.1.1 Collusion

In this research, based on the literature study and empirical evidence, the researcher established that:

- Collusion between individuals in the procurement cycle, specifically during the tender phase, is the main method to commit procurement fraud;
- Fraud during the tender phase is difficult to prove due to the collusion factor between the individuals, and
- The researcher found that collusion between the tendering company and employees of the company requesting the tender was the main method used during the commission of fraud during the tender phase. From the empirical evidence, it was established that 60% of the sample indicates that collusion is the main method utilised for defrauding during the tender phase in the procurement cycle.

4.2.1.2 Misrepresentation

- It was found that central to the finding of collusion, is the act of misrepresentation.
- Due to collusion, the company tendering makes a misrepresentation to the company requesting the tender, which then causes that misrepresented facts are tendered and the tender company wins the tender.
- It was found in the study that misrepresentations during the tender phase include: collusive tendering, bid rigging, exclusion of qualified tenderers, leaking of tender data and the manipulation of tenders.

4.2.1.3 Red flags

Similarities were noted between the responses from the participants and literature sources of red flags. It was found from empirical information the following are additional red flags:

- a close relationship between employees and vendors may lead to possible complicity;
- non-declarations of conflicts of interest;
- the market not tested on a frequent basis for new suppliers and prices;

- tenders accepted after closing date;
- distinct specifications for an item or service specified in the requisition;
- unrestricted access to tender box as well as unsecured tenders;
- tendering by only one supplier on a constant basis and the placing of repetitive orders just below the succeeding authorisation level;
- nonexistence of clear procurement procedures and policies, including segregation of duties;
- overriding of controls by management;
- omitting to take a vacation by procurement staff;
- backup documentation not attached to invoices and the acceptance of verbal work instructions;
- out of contract work conducted; and
- failure to conduct stock counts.

From this research, it was also established that red flags:

- Can be indicators of illicit activity such as tender fraud.
- Are warning signs and or trigger points of possible undue activity occurring and an indication that preventative measures (implementation of controls) should be taken.

4.2.1.4 Objectives of internal controls

It was found the objectives of internal controls are to:

- decrease risk to business and to protect resources;
- verify commercial information;
- conform law and regulation; and
- avoid and discover fraud.

4.2.2 Secondary findings

4.2.2.1 Forensic and criminal investigation

The researcher established the research participants had different viewpoints in terms of the concept of forensic and criminal investigation:

- The responses on forensic investigation from the participants with an audit background indicated disciplinary and administration corrective measures while the participants with an investigation background indicated the goal was to obtain proof to institute criminal proceedings.
- The majority of the participants indicated that forensic investigation is only concerned with the investigation of fraud or monetary loss. A small group of the participants with an audit background specified, it is the examination of documents.
- The participants with an audit background in the sample indicated a forensic investigation is the investigation into irregularities with the purpose to institute departmental hearings and to implement controls. The majority of the participants with an investigation background stated forensic investigation is the use of scientific methods to obtain evidence of an illicit activity.
- The majority of the participants had a similar view in terms of what a criminal investigation is.
- It was also found the participants had different views regarding the objectives of an investigation. The participants with an audit background were assessment orientated to follow up on administration irregularities and the reason for not following processes. Participants with an investigation background indicted the identification of the responsible person, the instituting disciplinary procedures and the recovery of possible losses, as objectives of an investigation.

4.2.2.2 Internal controls

In this research, based on the empirical evidence and literature, it was found that:

- The objective of internal controls during the tender phase is to ensure an unambiguous process during the attainment of the most appropriate quality and quantity of goods and or services at the lowest cost.
- Internal controls are a key element of the Foreign Corrupt Practices Act (FCPA) of 1977 and the Sarbanes-Oxley Act (SOX) of 2002. It was found a CEO and CFO can be held criminally liable for weak internal control processes.
- Regular review of internal controls in the procurement cycle in terms of compliance to policy and procedure is of paramount importance to ensure the

effectiveness of these controls and to prevent the occurrence of procurement fraud.

- Internal controls consist out of clear policies, procedures and guidelines. This includes, proper record keeping, information security, supervision by managers, the method of procuring goods and service and the manner in which a tender should be conducted.
- Effective internal controls will guarantee procedures are adhered to and closely followed.
- It was also found that effective internal controls would act as a deterrent and therefore prevent the commission of procurement fraud.
- Internal controls are a necessity and critical in the procurement cycle as it would ensure that adequate policies and procedure exist, governing the procurement process.
- Companies and entities with ineffective internal controls are susceptible to fraud;
- Without the proper policies or procedures, the segregation of duties of employees may be compromised and may lead to collusion.
- Proper systems including how the procurement process is to be conducted and allowing for audit evidence for review or investigation, was identified.

4.2.2.3 Investigation

In this research, based on the literature study, it was established that:

- The purpose of an investigation is to obtain evidence, discover the truth regarding the incident or illicit act, and to present these findings to a court of law or at civil proceedings.
- Natural and social sciences are embraced by forensic investigation. The scientific aspect of forensic investigation is concerned with natural science, while the social science is applying special knowledge, techniques and skills used by the investigator during an investigation.
- The goal of crime investigation and forensic investigation is to attain the truth.

4.2.2.4 Procurement process

The literature study and evidence from the sample proved the procurement process:

- comprises of a cycle with various phases;

- the nature of the business influences an entity's policy or procedure regarding procurement; and
- literature indicates two schools of thought regarding the amount of phases in the procurement cycle. The research participants agree with the 10 phases of the procurement cycle.

4.3 RECOMMENDATIONS

A purpose of this research was to develop good practice and to empower those involved in the investigation of procurement fraud. This is only achievable if the audit-investigation fraternity has sufficient knowledge and proper understanding and guidelines of what they are investigating. The researcher will therefore recommend supporting the findings to better equip the individuals involved in the investigation of procurement fraud and to enhance the internal control system of a business.

4.3.1 Collusion

- It is recommended that a company has a robust policy of disapproving the act of collusion during the procurement process. This policy needs to be widely distributed and communicated, not only to employees but also to suppliers. In addition, regular assessment of internal controls needs to be conducted to ensure compliance with procurement procedures.

The researcher also makes the following recommendations:

- **Conflict of interest declarations** - Management must ensure there is a comprehensive Conflict of Interest declaration process in place to assist the audit-investigation fraternity with the information needed to commence with an enquiry process;
- **Channels to make whistleblowing reports** - Whistleblowing mediums (fax, telephone, web reporting) should be widely communicated. The policy needs to be clear and highlight the information provided, will be treated as confidential and anonymous;
- **Whistleblowing to form part of the agenda** - during management meetings with departments, a dedicated person need to be assigned to take responsibility for the discussion;

- **Information system** - To identify people within the procurement domain (procurement department within a company and competing suppliers) to obtain information;
- **Investigative tool** - Public available data indicating a person's directorship in a company such as Deed Search and a Consumer Trace report listing the deeds against a person's name and contact data – cellular phone numbers and addresses may be well worth the time in obtaining a nexus between individuals, and
- **Electronic investigative tool** – The World Wide Web, in specific reference Google and Facebook assists in connecting the dots to link people.
- Regular review of internal controls needs to be conducted to ensure the effectiveness of these controls.

4.3.2 Training

In terms of training, the researcher presents the following recommendations:

- It is recommended that individuals within the audit-investigation fraternity need to undergo continuous training courses, including in service training based on the literature study and empirical information of this study.
- It is suggested that individuals within the audit-investigation fraternity be educated in the subtle aspects regarding the elements of fraud to equip themselves in identifying and investigating the crime.
- Individuals within the audit-investigation fraternity undergo procurement fraud training to equip them with the knowledge in identifying phases in the procurement cycle susceptible to fraud.
- Individuals in the audit-investigation fraternity must be encouraged to equip themselves with the knowledge by study and attending courses, to empower them to address procurement fraud.
- It is recommended that training be provided to audit-investigation fraternity employees of this concept and the social and natural science aspect of forensic investigation.
- Individuals within the audit-investigation fraternity need to be trained to understand how the procurement cycle functions, including the phases in the

mentioned cycle. With this knowledge, the audit-investigation fraternity will identify anomalies and or red flags in the procurement processes.

- Identified individuals in the procurement department to be trained in the concept and identification of red flags.

4.3.3 Red flags

The researcher recommends the following regarding red flags:

- The attached checklist (Annexure A) of possible red flags is to be used during an investigation into allegations of procurement fraud.
- Procurement staff also to be cautioned continuously to treat procurement information as confidential.

4.3.4 Secondary recommendations

In light of the above recommendations, the researcher thought it prudent to make secondary recommendations:

- The audit-investigation fraternity should focus on identifying weaknesses in the internal control environment, to impede on opportunities to commit fraud. It is therefore suggested a document containing likely internal control weaknesses in the procurement environment, (especially during the tender stage), to be compiled and further researched. This document to serve as the basis when conducting risk based reviews in the procurement environment. It is also recommended continuous training is undergone to identify control weaknesses.
- Internal controls comprise of policies and procedures that individuals should adhere to, ensuring compliance and the different business processes are conducted in a straightforward and ethical manner.
- It is also suggested that procurement employees are profiled for criminal records as well as verification of references before being employed.
- Individuals within the management structure of a company's procurement domain should ensure internal controls are clearly stipulated in policies, procedures and guidelines. Corrective or disciplinary action, including retraining or redeployment, must be taken against individuals who does not follow the internal control process or override it.

- Employees in the audit-investigation fraternity and procurement department must comply with the FCPA and SOX legislation as it is listed on the New York Stock exchange.
- Ineffective or vague internal controls need to be identified quarterly and amended to ensure more efficient internal controls. It is proposed that management must issue a certificate confirming the internal controls and risks have been reviewed. This certificate must be submitted to the Head of Procurement of the relevant company.
- It is recommended that sound governance policies such as Conflict of Interest, Code of Business Ethics and Conduct, Delegation of Authority, approved BEE policies are developed to ensure fair and ethical business practises and to deter fraud.

4.4 CONCLUSION

The researcher was able to address the research questions by utilising the design and methodology of this research, that revealed appraising internal controls to detect procurement fraud during the tender phase, is very important and can serve to prevent and detect procurement fraud. This research established what internal controls are and how appraising internal controls will assist in the investigation of procurement fraud. Collusion was identified as the focal aspect during the commission of fraud during the tender phase in the procurement cycle. Red flags of procurement fraud serve as “early warning signs” that possible fraud is occurring and therefore it is imperative for the audit-investigation fraternity and procurement employees alike, to be able to identify and interpret these signs.

Apart from the findings and recommendations made, it is imperative that the audit-investigation fraternity align their efforts to not only identify a perpetrator in a procurement fraud investigation, but also strive to improve the internal control environment. Initiatives for training in procurement fraud and the role internal controls play, are very important. Allegations of procurement fraud are very difficult to prove because of the various dimensions. Individuals in the audit-investigation fraternity need to be acquainted and familiar with present methods used to commit procurement fraud during the tender phase in the procurement cycle.

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6. ANNEXURES

6.1 ANNEXURE A – RED FLAGS CHECKLIST

1. Recurring awards of contracts to the same supplier.
2. Competitive supplier complaints and protests – grievances and objections of other tenderers are not entertained.
3. Criticisms about quality and quantity.
4. Various contracts awarded to a specific supplier just below the competitive base price.
5. Irregular tender patterns - most suppliers' tender prices are high, and one is low, that's an obvious irregularity which may be due to pricing on poor quality.
6. “*Go-between*” fees – the payment to a person in putting a tender together.
7. Debatable tenderer - vendors sometimes take advantage of an entities' trust and several tenderers secretly collude to take turns being the lowest tenderer and tenders prices higher than the market value.
8. Awards to non-lowest tenderer.
9. Scope changes after contract award.
10. Work is added after contract award to increase the contract value.
11. Sole supplier – the market not sourced for competitive pricing due to a perceived emergency.
12. Debatable minority ownership – companies' owners indicating they are of the minority group, but they are not.
13. Large gifts and entertainment expenses.
14. Round invoice amounts.
15. Copies of supporting documentation instead of originals.
16. Duplicate payments.
17. Sequential invoices paid.
18. Employee-vendor address match.
19. Multiple invoices paid on the same date.
20. Slight variation of vendor names.
21. The close association of employees with suppliers or companies.
22. Regular failure to test the market for suppliers and prices.
23. Acceptance of late tenders.

24. Special specifications written by end users to ensure exclusion of certain suppliers.
25. Inadequate access control to tender box – only one person having the keys or tenders not secured after submission.
26. Only one supplier constantly tendering/submitting a quote.
27. Lack of clear procurement procedures and policies.
28. Lack of segregation of duties within the procurement process.
29. Continuous management overrides.
30. Procurement staff not taking leave.
31. Omission of supporting documentation to invoices.
32. Verbal work instructions, and
33. Work conducted out of contract scope.

6.2 ANNEXURE B: INTERVIEW SCHEDULE

TOPIC: APPRAISING INTERNAL CONTROLS TO DETECT PROCUREMENT FRAUD AT ANGLOGOLD ASHANTI MINES

RESEARCH AIMS

The aim of this research is to assess the internal control mechanisms in place at AngloGold Ashanti to investigate and detect procurement fraud. These aims will allow the researcher to make recommendations regarding appraising internal management control measures to detect and investigate the occurrence of procurement fraud.

RESEARCH QUESTIONS

- What does procurement fraud entail?
- What internal controls exist in procurement procedures to detect and investigate procurement fraud?

You are kindly requested to answer the following questions in this interview schedule, for the research. The questions, responses and the results will be revealed.

The researcher is bound to his assurances and guarantees by the ethics code for research of the University of South Africa. The information you provide will be used in a research project for a Master of Technology degree registered with the Programme Group: Police Practice at the University of South Africa. The analysed and processed data will be published in a research report.

Your answers will be noted by the interviewer himself, on paper. Should any question be unclear, please ask the researcher for clarification. Only one answer per question is required. When answering the questions, it is very important to give your own opinion.

Permission has been obtained from the various Heads of Department in advance, for the interview to be conducted.

I hereby give permission to be interviewed and that information supplied by me can be used in this research.

YES/NO

SECTION A: HISTORICAL INFORMATION

1. What is your age?
2. What is your designation?
3. To which department are you attached to and what is the function of the mentioned department?
4. How long have you been employed within the investigation/audit domain?
5. Did you attend a fraud investigation course? Yes/No (If yes, please elaborate).
6. Are you affiliated with any professional body concerned with fraud investigation or auditing?
7. What tertiary qualifications have you obtained?
8. Have you ever investigated allegations of fraud in procurement/supply chain?
9. Have you assessed internal controls to detect and investigate procurement fraud?

SECTION B: WHAT DOES PROCUREMENT FRAUD ENTAIL?

10. What do you understand regarding the concept of forensic investigation?
11. What do you understand regarding the concept of criminal investigation?
12. What do you see as the objectives of an investigation?
13. What is your understanding of the term: procurement in the corporate environment?
14. Have you been involved in a procurement fraud investigation (reference to 1 incident will suffice)? If yes, please explain your involvement and the outcome of the investigation (investigator, complainant)?
15. According to your experience, does the procurement cycle comprise phases? Please elaborate on each phase?
16. In your opinion, during which phase of the procurement cycle do misrepresentations and or alterations usually occur?

17. What kind of misrepresentations and or alterations is usually made during the phase as discussed in the previous question?
18. What is your understanding of the term: fraud?
19. According to your experience, are there kinds of fraud? Please elaborate?
20. In your view and work experience, please provide a description of procurement fraud in specific reference to the tender phase?
21. What is your opinion in terms of the difficulty experienced to prove fraud during the tender phase of the procurement cycle? Please elaborate?
22. According to your experience and knowledge what methods are employed during the tender phase of the procurement cycle to commit fraud (bid rigging, collusion between tenderers)?
23. What is your understanding of the concept of “*red flag indicators*” of fraud?
24. What implications does fraud have on a business entity? Please elaborate?

SECTION C: WHAT INTERNAL CONTROLS EXIST IN PROCUREMENT PROCEDURES TO DETECT AND INVESTIGATE PROCUREMENT FRAUD?

25. What do you understand of the concept of internal controls in terms of the procurement process or fraud?
26. Please provide examples of internal controls in a procurement process?
27. What is your opinion regarding the necessity for internal controls in the procurement cycle?
28. Will internal controls assist in preventing procurement fraud? If the answer is yes, please explain?
29. How will internal controls assist to detect and investigate procurement fraud?
30. According to your experience and knowledge, will appraising internal controls assist in identifying possible fraud risks within the procurement process in particular the tender phase? Please explain your answer?
31. In your opinion, is the regular assessment and audit of internal controls in procedures or policies, necessary? If your answer is yes, please elaborate?
32. Is procurement fraud a risk to business and will the implementation of internal controls mitigate the fraud risk? Please elaborate?

6.3 ANNEXURE C: PERMISSION TO CONDUCT RESEARCH



TO : E Pretorius
Head of Department - Group Forensics
AngloGold Ashanti Ltd.
76 Jeppe Street
Newtown
Johannesburg
2001

From : J Venter
Forensic Auditor – Group Forensics
AngloGold Ashanti Ltd.
76 Jeppe Street
Newtown
Johannesburg
2001

DATE : 9 September 2014

SUBJECT : Permission to conduct research as part of the Magister Technologiae
in Forensic Investigation degree.

Dear Archie,

Herewith a formal request for permission to conduct research as part of my Magister Technologiae in Forensic Investigation study. This written request is to formalise the already granted permission as it will be incorporated into the final dissertation. Your approval will be much appreciated to complete this research study.

Please find below detail regarding the research to be conducted.

1. **Title of the study**

THE ASSESSMENT INTERNAL CONTROLS TO DETECT PROCUREMENT FRAUD DURING THE TENDER STAGE AT GOLD MINES

2. **Purpose of the study**

2.1 The purpose of this study is for the fulfillment of the requirements for the degree of Masters in Forensic Investigation at the University of South Africa. The researcher considers the following as the purpose for this research:

- Evaluation: the researcher will investigate particular programs, policies or case files concerning procurement with the intention of weighing up the strengths/weaknesses and consider how things might be improved;
- Exploratory research: the researcher has identified the weak points and must address it. The researcher will address the problem by exploring and looking for new data by reading and interviewing experts;
- Developing good practice: the researcher will use the new found data to solve the research problem and also make recommendations for good practice as to address the problem under research;
- Empowerment: this research will empower the researcher with new knowledge and it will also empower other individuals, by publishing an article and presenting the articles to lecturers.

2.2 The researcher wishes to empower other individuals within the investigation domain by providing experience and knowledge concerning internal controls for the detection and investigation of procurement fraud. In addition, the researcher will attempt to empower "Top Management" in the mining fraternity through this research by reporting findings and providing recommendations on the research topic. This research will empower the researcher and his colleagues to solve practical problems and improve current procedures addressing procurement fraud as well as internal controls.

3. Research Procedure

- To fulfil the above-mentioned objectives, the researcher will make use of interviews as one of his data collection techniques. Semi-structured face to face interviews with the interviewees will be conducted. The questions will be open ended and will address the research questions and aims. The interviews will be conducted in private at the respective offices after permission has been granted.
- The researcher will ensure that no words are put in respondent's mouth by asking questions relevant to procurement fraud during the tender stage and accept the given answers from the respondents. The researcher will be courteous and respectful at all times.

4. Risks and discomfort

The respondents will be protected from physical and psychological harm, and will not be subjected to unusual stress or discomfort. The information gathered during from the respondents will be kept confidential and safeguarded. As already mentioned, interviews will be conducted in private with the participants and any information gathered from AngloGold Ashanti, will be treated with the necessary care and discretion.

5. Benefits

The research participants will be able to share their experiences with the researcher and in the process will be able to make recommendations that will be included in the research project. In participating in this research project, the participants will gain knowledge on what procurement fraud entails and what internal controls exist to detect and investigate fraud during the tender stage of procurement.

6. Participants' rights and confidentiality

Participation in this study is voluntary and a research participant can withdraw at any stage of the research. If a participant withdraws, the information gathered will be destroyed. Research participant's information will be kept confidential. The questionnaire will be completed anonymously to protect the confidentiality. When the study is completed, the data gathered will be used for research purposes.

7. Permission

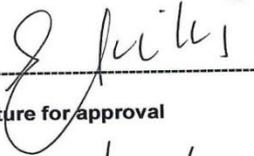
Permission granted:

YES NO

Name and Surname:

Eugene Pretorius

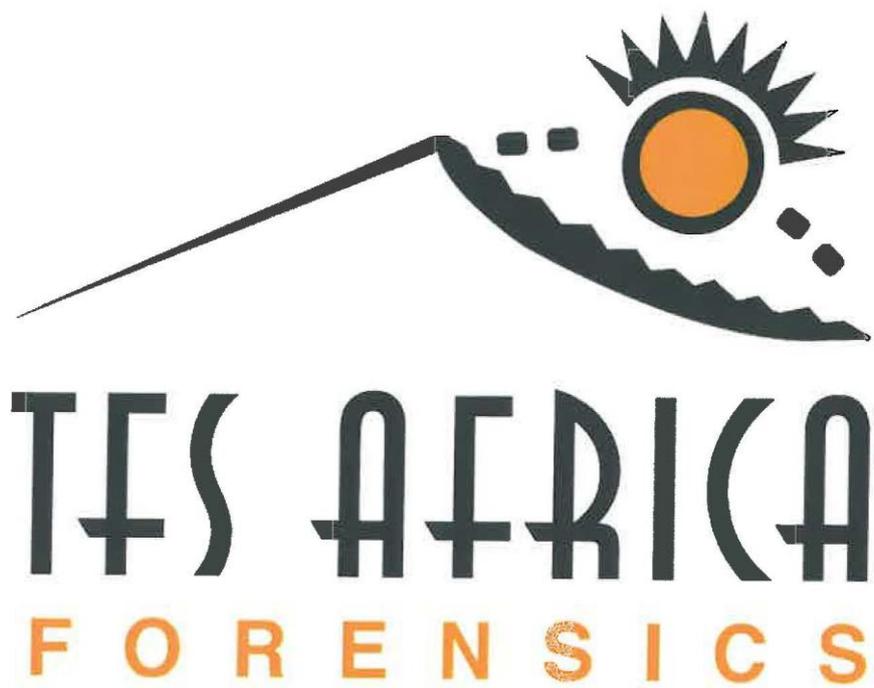
Signature for approval



Date:

15/09/2014

6.4 ANNEXURE D: TFS FORENSICS





INTRODUCTION

TFS Africa (Pty) Ltd was established in 1990. It was then known as Strategic Solutions. To ensure growth and also to reflect the realities of a new South Africa, Strategic Solutions was collapsed into TFS Africa (Pty) Ltd - TFSA. TFSA reflects the diverse nature of South Africa both in its ownership and operating levels. It is proud to be a Level 2 BBB EE certified contributor.

PROFESSIONAL SERVICES

Forensic Investigative Services:

The scope of our Investigations and Forensic Audit department is diverse. We conduct investigations and audits in all spheres. These include (to mention but a few):

- ❖ Criminal investigations, especially Fraud & Corruption, Procurement Fraud, Theft specializing in the Mining Industry, Medical Aid Funds, Financial sector as well as other criminal investigations i.e. Murder and Robberies and Corporate Crimes
- ❖ Civil litigation and recoveries
- ❖ Polygraph examinations

Our experienced criminal investigators joined us from specialized units in the SAPS as well as the NPA. The combined experience of our (fraud and corruption) investigators totals more than 340 years.

TFSA's team of experienced investigators is members of CFE (Certified Fraud Examiners) and IAFCI (International Association of Financial Crimes Investigators).

A separate unit, specializing in crimes in the mining industry is responsible for investigating the complex crimes that are prevalent in the mining sector. Their scope ranges from Fraud and Corruption, Procurement Fraud related to crimes, theft of GBM (gold bearing material) as well as ethnic rivalry and inter-union related crimes ranging from murder and intimidation to assault.

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Reg No: 2011/105473/07
Director: D. Van Heerden; alt T. Dlamini
PSIRA Number 2469510*





This document will further only focus on Procurement related Crimes in the mining industry, investigated by TFSA.

Year	Reported cases of procurement fraud during tender phase	Value "R"
2010	2	876 000.00
2011	1	567 000.00
2012	4	5 032 000.00
2013	4	9 400 000.00
2014	7	16 250 000.00
2015	11	31 700 000.00

The above figures suggest that there has been an increase in the occurrence of Procurement Fraud related crimes during the tender phase in the procurement cycle.

From experience gathered during investigation of Procurement related crimes since 2010, it is evident that collusion between the employees of a contracting company and the company calling for the tender played an integral part in the said offenses.

We would like to highlight one instance where a supplier was forced to buy a brand new BMW for the procurement manager of a large international mining company. The supplier did buy the manager a brand new BMW. The second year the same manager insisted that Supplier buys him a specific farm. That was when the supplier spilled the beans. Upon questioning the Supplier, he replied: "I simply couldn't afford it. In addition to the purchase of the BMW, he (Procurement manager) also solicited more than R500 000.00 from me"

I L Raubenbach

Senior Manager Forensic Investigations

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PSIRA Number 2469510



