

**AN EVALUATION OF THE IMPACT OF THE  
NON-FERROUS METALS CRIME COMBATING COMMITTEE ON COPPER  
CABLE THEFT**

by

**ANDRÉ SAREL LIEBENBERG**

submitted in accordance with the requirements  
for the degree of

**DOCTOR OF PHILOSOPHY**

in the subject

**CRIMINAL JUSTICE**

at the

**UNIVERSITY OF SOUTH AFRICA**

**SUPERVISOR: PROF. JG VAN GRAAN**

**NOVEMBER 2020**

## DECLARATION

**Name:** André Sarel Liebenberg  
**Student number:** 3755-720-3  
**Degree:** Doctor of Philosophy in Police Science  
**Title:** *"An evaluation of the impact of the Non-Ferrous Metals Crime Combating Committee on copper cable theft"*

I declare that the above thesis is my own work and that all the sources that I have used or quoted have been indicated and acknowledged using complete references.

I further declare that I submitted the thesis to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at UNISA for another qualification or at any other higher education institution.

A handwritten signature in black ink, appearing to read 'A. Liebenberg', enclosed within a large, loopy oval shape.

André Sarel Liebenberg

2020-11-13

## DEDICATION

When an individual achieves the status of Doctor resulting from a dynamic topic like "*An evaluation of the impact of the Non-Ferrous Metals Crime Combating Committee on Copper Cable Theft*" one must do so cognizant of the impact of the crime not only on the economy (economic sabotage) of South Africa but also the many people that have lost their lives through electrocution during the commission of the crime. Considering these factors, the dedication section posed a problem to the researcher because of the number of individuals who participated in its creation.

Thus, this thesis is dedicated to my mentors and icons who made it amazingly easy to function as a team and ensured an effective and efficient research output on the topic.

The researcher dedicates this work to:

- i. To God my Creator all the glory (Psalm 37:5)
- ii. Professor Johan van Graan
- iii. Professor Susan Terblanche
- iv. Professor Michelle Karels
- v. Principal Director/Owner Roy Robertson of Combined Private Investigations (CPI)
- vi. International Forensics Expert, André Johan Liebenberg
- vii. Forensic Investigator, Dave Pietersen
- viii. Forensic Investigator, Faan Steenkamp
- ix. Dr Freddie Kruger
- x. My beloved wife, Joan Liebenberg
- xi. My children— André, Petro and Renaldo Liebenberg
- xii. My grandchildren – Keira, Dané, Kelyn, Zoe and Aniq
- xiii. Jomien Olivier
- xiv. A participant who was a victim of electrocution

## **ACKNOWLEDGEMENTS**

This study is the product of a synergistic working relationship between various proactive and inventive minds. It began in 1974 when I answered my calling to work as a community server. My passion for developing myself and other human beings was the main driver of God's plan for me during this journey. I would be remiss not to thank the individuals who have made my path just that little easier to walk:

### **Professor Johan van Graan**

As a student, Prof, when I hear your voice, it is akin to taking a Mercedes to the nearest petrol station and fuelling it with super high-tech fuel, and resultantly I have developed into a competent researcher under your expert tutelage. You have instilled me with motivation and the ability to live my passion pro-actively and therein assist in combatting copper cable theft in South Africa. As your student, I will always remember your words: *"André, you must always remember it is not where we are coming from; it is where we are going to."*

### **Professor Susan Terblanche**

The research team appreciates your guidance and experienced inputs. Your invaluable contribution is visible in Phase 1 of this research project. On behalf of the research team, we appreciate and thank you very much.

### **Professor Michelle Karels**

We would like to acknowledge your professional services and adaptability in bringing this project to fruition. The research team is honoured to collaborate with you. Thank you for polishing the language and formatting concerns.

### **Jomien Olivier**

During this journey, you ensured that all participant interviews were typed verbatim and therefore I would like to thank you as my personal assistant (and often safe keeper) for a job well done under exceedingly difficult circumstances including the isolation caused by COVID-19. I am aware that this was a challenging year health-wise, but as my wife always says, *"Olla is yster."*

### **Joan Liebenberg**

Sometimes in life, a diamond lacks proper appreciation and words of acknowledgement. During the good times, tough times, and extra-ordinary challenges you became my pillar and comforter and always showed a clear understanding of this journey, which required a high standard of discipline, motivation, and a cheerful outlook towards life. Your presence and support made a difference and allowed me the space to achieve my dream. I thank you, my wife.

### **André Liebenberg (Son)**

My son, you were present throughout this challenging journey, and your motivation and belief buttressed my drive to finish this project. Your recent promotion at work is a shining example to me. I am humbled by your dedication, loyalty, and service to the community, which I use as best practices to guide me. Thank you for always believing that "*Pa jy is yster.*"

### **Petro Louise Liebenberg (Daughter)**

Your approach to the COVID-19 pandemic and the havoc that it wreaked on your professional life stood as an example to me during my research. Your quiet and humble support have shown me that you are a woman of strength, leadership, and level-headedness in any given situation. I dedicate this research to you to serve as my legacy.

### **Renaldo Liebenberg (Son)**

At the beginning of 2020, a severe motor vehicle accident caused us all to re-evaluate our lives. During the many hospital visits, I realised that God had given us a second chance with you, which humbled me and strengthened my belief in God's grace. Thank you for your 24/7 support. I dedicate this research to you as my legacy.

### **Frankie Liebenberg (Brother)**

In life, you need mentors, and more specifically, on the doctoral journey at the University of South Africa (UNISA). Success is not an individual pursuit in this instance. This is where you proved to be the glue that keeps the family together. Thank you for your support and for making me believe that I can. You are always there when I want to cry or laugh, and in tough times and good times, you stay the same. You are like a

good red wine from the Western Cape, the older you get, the better you become. Allow me to acknowledge you humbly and to dedicate this research to you as my legacy.

### **Advocate Riaana Botha**

During my research journey, I lost one of my mentors, heroes, and a pure legend. I met you for the first-time during AJ Liebenberg's funeral. AJ always told me about you and that you are an excellent Advocate and that you and I should meet. Unfortunately, we met at a time when my life was undergoing a rough patch. Together, however, we arranged the funeral with sympathy and pride. During this process, I observed that you are a woman of strength which is supported by your profile. In 2005 you started your journey to become an Advocate and received your LLB in 2014. In December 2014 you were admitted as Advocate – a journey which I much admire. I am humbled to acknowledge your support during the interviews, which required a novel approach because of the COVID-19 pandemic. I respect you and dedicate this research output to prove my appreciation.

### **Dr Freddie Kruger**

When I first met you, I was humbled by your greeting - "*Noem my Freddie*" – which seemed to sum-up your humble and unique nature. Your professional and competent service was given without envy or prejudice, and for this, I am exceptionally grateful. I want to acknowledge the guidance you gave me on submitting a research publication that allowed me to fulfil the UNISA unit standards for a doctoral degree.

### **André Johan Liebenberg**

As a highly competent, global specialist on forensic investigations, you never withheld your experience, knowledge, techniques, and methods from me. I want to acknowledge you as my mentor, icon, and a legend during this research. The passion and drive with which you shared your skills will stay with me for the rest of my life. I honour and respect you. May you rest in peace and I salute you.

## **ABSTRACT**

This study aims to evaluate the Non-Ferrous Metals Crime Combating Committee's impact on combating copper cable theft in South Africa. Data was collected via in-depth interviews with awaiting trial detainees charged with copper cable theft at the Pollsmoor Correctional Centre in the Western Cape; members of the Mpumalanga and Gauteng Provincial Non-Ferrous Metals Crime Combating Committee; members of Business Against Crime South Africa; and investigators attached to Combined Private Investigations who investigate copper theft nationally. The in-depth interviews provided a comprehensive understanding of participant experiences relating to the impact of the Non-Ferrous Metals Crime Combating Committee on the combating of copper cable theft in South Africa. Moreover, the researcher performed a thorough literature study of the phenomenon locally and internationally.

Research findings indicate shortcomings in the Non-Ferrous Metals Crime Combating Committee's effectiveness, limiting its impact on preventing copper cable theft. Based on these findings, the study recommends that the Non-Ferrous Metals Crime Combating Committee be replaced with a specialised South African Police Service Non-Ferrous Metals Theft Unit. Consequently, this study puts forward a set of recommendations proposing a systematic pro-active plan to address and minimise copper cable theft in South Africa. The proposed plan convincingly presents practical solutions to minimise copper cable theft and contributes to the current body of scholarship on copper cable theft in South Africa.

**Key terms:** Copper cable; copper dealer; combating copper theft; essential infrastructure; *modus operandi*; non-ferrous metal theft; Non-Ferrous Metals Crime Combating Committee; scrap metal dealers; strategies to prevent copper cable theft; the Second-Hand Goods Act 6 of 2009.

## NGAMAFUPHI

Inhloso yalolu cwaningo ukuhlola umthelela wohlelo lwe-*Non-Ferrous Metals Crime Combating Committee* mayelana nokuqedwa kokutshontshwa kwentambo yogesi (*copper cable*). Idatha iqoqwe ngokusebenzisa izinhlolovo ezijulile ezenziwa ngokusebenzisa iziboshwa eziboshelwe izintambo zikagesi ezisamele ukugwetshwa ejele lase *Pollsmoor Correctional Centre* ngaseNtshonalanga Kapa, amalunga e*Mpumalanga and Gauteng Provincial Non-Ferrous Metals Crime Combating Committee*, amalunga e*Business Against Crime South Africa* kanye nabaphenyi abahambisana nophiko lwe*Combined Private Investigations* oluphenya ukutshontshwa kwezintambo zikagesi ezweni lonke. Lezi zinhlolovo ezijulile zinikeze ulwazi olubanzi lwabadlalindima olumayelana nomthelela we*Non-Ferrous Metals Crime Combating Committee* mayelana nokuqedwa kokutshontshwa kwezintambo zikagesi. Ngaphezu kwalokho, umcwaningi wenze ucwaningo olunzulu lombhalo wobuciko mayelana nokutshontshwa kwezintambo zikagesi lapha ekhaya kanye nasemhlabeni wonke jikelele.

Ulwazi olutholakele lukhombisa iziqi ezikhinyabeza ukusebenza kahle kweKomithi mayelana nokuvimbela umthelela walo mayelana nokutshontshwa kwezintambo zikagesi. Ngezizathu ezisuselwa phezu kwalolu lwazi, lolu cwaningo lubeka phambili isethi lezincomo ezinganceda iKomiti ekuqiniseni umthintela walo ngokuhlongoza uhlelo olugqugquzelayo lokunciphisa izinga lokutshontshwa kwezintambo zikagesi eNingizimu Afrika. Lolu hlelo oluhlongoziwe ngaphandle kokungabaza lwethula izixazululo ezenzeka empilweni yangempela ukunciphisa ukwetshiwa kwezintambo zikagesi kanti lokhu kunegalelo kwiziko lamanje futhi luqhubekisa iziko lamanje lwezifundo esimayelana nokwetshiwa kwezintambo zikagesi.

**Amagama asemqoka:** Intambo kagesi; umuntu ohweba ngezintambo zikagesi, Ukulwa/ukuqedwa kokutshontshwa kwezintambo zikagesi; ingqalasizinda eyiNsika; Ingqubo elandelwayo; ukwetshiwa kwe*Non-ferrous metal*; Ikomiti elibhekene nekutshontshwa kwe *Non-Ferrous Metals Crime Combating Committee*; Abahweba ngezinsimbi; Amasu okuvikela ukutshontshwa kwezintambo zikagesi; uMthetho 6 ka 2009 omayelana nokuThengiswa kweMpahla ethengiswa Kwesibili.



## KAKARETŠO

Maikemišetšo a thutelo ye ke go lekola khuetšo ya Komiti ya Twantšho ya Bosenyi bja Dimetale tše di Sego tša Tšhipi ka ga go lwantšha kutso ya megala ya koporo. Datha e kgobokeditšwe ka mokgwa wa ditherišano tše di tseneletšego tše di sepeditšwego le mahodu a megala ya koporo ao a golegilwego ao a letetšego go sekišwa Senthareng ya Tshokollo ya Pollsmoor go la Kapa Bodikela, maloko a Diprofense tša Mpumalanga le Gauteng a Komiti ya Twantšho ya Bosenyi bja Dimetale tše di sego tša Tšhipi, maloko a Dikgwebo tša Kgahlanong le Bosenyi tša Afrika Borwa le banyakišiši bao ba dirišanago le Dinyakišišo tša Praebete tše Kopantšwego tše di nyakišišago kutso ya koporo kemong ya bosetšhaba. Ditherišano tše di tseneletšego tše di file kwešišo ka botlalo ya maitemogelo a batšeakarolo ye e sepelelanago le khuetšo ya Komiti ya Twantšho ya Bosenyi bja Dimetale tše di sego tša Tšhipi ka ga go lwantšha kutso ya megala ya koporo. Gape, monyakišiši o dirile thutelo ya dingwalo ka botebo ya kutso ya megala ya koporo tikologong ya leagong le kemong ya boditšhabatšhaba.

Dikhwetšo tša dinyakišišo di šupa mafokodi ao a lebanego bokgoni bja Komiti tšhitišong ya khuetšo ya yona go kutso ya megala ya koporo. Go ya ka dikhwetšo tše, thutelo ye e hlagiša sehlopha sa dikeletšo tše di ka thušago Komiti go tšwetša khuetšo ya yona pele ka go šišinya leano la go itokišetša seemo se ka diregago ka mokgwa wo o beakantšwego go fokotša kutso ya megala ya koporo ka Afrika Borwa. Leano leo le šišintšwego le hlagiša ka mo go kgodišago ditharollo tše di ka phethagatšwago go fokotša kutso ya megala ya koporo ka gona la ba la seabe go le go tšwetša pele popego ya bjale ya borutegi ka ga kutso ya megala ya koporo.

**Mareo a bohlokwa:** Megala ya Koporo; morekiši wa Koporo; Go Lwantšha kutso ya koporo; popego ye bohlokwa ya motheo; *Modus operandi*; kutso ya dimetale tše di sego tša Tšhipi; Komiti ya Twantšho ya Bosenyi bja Dimetale tše di sego tša Tšhipi; barekiši ba ditlheketlhekge tša metale; Togamaano go thibela kutso ya megala ya koporo; Molao wa bo6 wa 2009 wa Taolo ya Thoto ye e sego ye mpsha.

## LIST OF ACRONYMS & ABBREVIATIONS

<b>BACSA</b>	Business Against Crime South Africa
<b>BIR</b>	Bureau of International Recycling
<b>BTP</b>	British Transport Police
<b>C4ISR</b>	Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance
<b>CAS</b>	Crime Administration System
<b>CCTV</b>	Closed-Circuit Television
<b>CDAA</b>	Copper Development Association Africa
<b>CEA</b>	Canada Electricity Association
<b>CIG</b>	Crime Information Gathering
<b>CMC</b>	Crime and Misconduct Commission
<b>Codelco</b>	<i>Corporación Nacional del Cobre de Chile</i>
<b>COGTA</b>	Department of Cooperative Governance and Traditional Affairs
<b>COM</b>	Chamber of Mines
<b>COP</b>	Common Operating Picture
<b>COSATU</b>	Congress of South African Trade Unions
<b>COVID-19</b>	Coronavirus
<b>CPA</b>	Criminal Procedure Act, 51 of 1977
<b>CPI</b>	Combined Private Investigations
<b>DA</b>	Democratic Alliance
<b>DEA</b>	Department of Environmental Affairs
<b>DHA</b>	Department of Home Affairs
<b>DIRCO</b>	Department of International Relations and Cooperation
<b>DNA</b>	Deoxyribonucleic Acid
<b>DOJ&amp;CD</b>	Department of Justice and Constitutional Development
<b>DOL</b>	Department of Labour
<b>DPCI</b>	Directorate for Priority Crime Investigation
<b>DSD</b>	Department of Social Development
<b>DSO</b>	Designated Second-Hand Goods Control Officer
<b>ESKOM</b>	Electricity Supply Commission (previously ESCOM)
<b>EUCPN</b>	European Crime Prevention Network
<b>FBI</b>	Federal Bureau of Investigation
<b>FLASH</b>	Firearms Liquor and Second-Hand Goods Control
<b>FSL</b>	Forensic Science Laboratory

<b>GEOINT</b>	Geospatial Intelligence
<b>GPS</b>	Global Positioning System
<b>ICSG</b>	International Copper Study Group
<b>ICT</b>	Information and Communication Technology
<b>ISCNFM</b>	Intelligence Sub-Committee on Non-Ferrous Metals
<b>ISO</b>	International Organisation of Standards
<b>ISS</b>	Institute for Security Studies
<b>ITAC</b>	International Trade Administration Commission
<b>LME</b>	London Metal Exchange
<b>MRA</b>	Metal Recycling Association of South Africa
<b>NFMCCC</b>	Non-Ferrous Metals Crime Combating Committee
<b>NFTCC</b>	Non-Ferrous Theft Combating Committee
<b>NICB</b>	National Insurance Crime Bureau
<b>NICOC</b>	National Intelligence Coordinating Committee
<b>NPA</b>	National Prosecuting Authority
<b>PET</b>	Polyethene terephthalate
<b>Pol-PRIMETT</b>	Police-Private Partnership to Tackle Metal Theft
<b>PRASA</b>	Passenger Rail Agency of South Africa (which includes Metrorail)
<b>PSIRA</b>	Private Security Industry Regulatory Authority
<b>REU</b>	Rail Enforcement Unit
<b>SACCI</b>	South African Chambers of Commerce and Industry
<b>SADPMR</b>	South African Diamond and Precious Metals Regulator
<b>SANDF</b>	South African National Defence Force
<b>SAPO</b>	South African Post Office
<b>SAPOL</b>	South Australia Police
<b>SAPS</b>	South African Police Service
<b>SARCC</b>	South African Rail Commuter Corporation
<b>SARS</b>	South Africa Revenue Service
<b>SARPA</b>	South African Revenue Protection Association
<b>SNCF</b>	French National Railway [ <i>Société nationale des chemins de fer français</i> (SNCF)]
<b>SOE</b>	State-Owned Entities
<b>SONA</b>	State of the Nation Address
<b>SSA</b>	State Security Agency

<b>TECO</b>	Tampa Electric Company
<b>TELKOM</b>	South African wireline and wireless telecommunications provider
<b>TRANSNET</b>	South African rail, port, and pipeline company
<b>UIC</b>	International Union of Railways [ <i>Internationale des Chemins de fer</i> (UIC)]
<b>UK</b>	United Kingdom
<b>UNISA</b>	University of South Africa
<b>USA</b>	United States of America

## TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION .....	iii
ACKNOWLEDGEMENTS.....	iv
ABSTRACT .....	vii
NGAMAFUPHI .....	viii
KAKARETŠO .....	ix
LIST OF ACRONYMS & ABBREVIATIONS .....	x
CHAPTER ONE .....	1
GENERAL ORIENTATION.....	1
1.1    INTRODUCTION .....	1
1.2    BACKGROUND TO THE STUDY .....	1
1.3    PROBLEM STATEMENT .....	8
1.4    RESEARCH AIM .....	13
1.5    RESEARCH PURPOSE .....	14
1.6    RESEARCH QUESTIONS.....	15
1.7    KEY THEORETICAL CONCEPTS.....	16
1.7.1    Theft .....	16
1.7.2    Copper.....	16
1.7.3    Copper dealer.....	16
1.7.4    Non-Ferrous Metals.....	17
1.8    VALUE OF THE RESEARCH.....	17
1.9    RESEARCH APPROACH AND DESIGN .....	17
1.10   DEMARCATON OF THE STUDY.....	18
1.11   POPULATION AND SAMPLING PROCEDURE.....	18

1.12	DATA COLLECTION .....	19
1.13	DATA ANALYSIS.....	21
1.14	METHODS TO ENSURE TRUSTWORTHINESS.....	23
1.15	ETHICAL CONSIDERATIONS .....	24
1.16	SUMMARY .....	25
	CHAPTER TWO.....	26
	AN OVERVIEW OF COPPER CABLE THEFT IN SOUTH AFRICA AND INTERNATIONALLY .....	26
2.1	INTRODUCTION .....	26
2.2	THE MAGNITUDE OF COPPER CABLE THEFT IN SOUTH AFRICA.....	27
2.3	THE IMPACT OF COPPER CABLE THEFT IN SOUTH AFRICA.....	34
2.3.1	Economic impact .....	34
2.3.2	Impact on transportation .....	36
2.3.3	Impact on telecommunications .....	37
2.3.4	Impact on the agricultural sector.....	37
2.3.5	Impact on electricity supply.....	37
2.3.6	Impact on critical infrastructure.....	39
2.4	AN OVERVIEW OF COPPER CABLE THEFT INTERNATIONALLY .....	41
2.4.1	United States of America .....	42
2.4.2	United Kingdom .....	47
2.4.3	China .....	48
2.4.4	Australia.....	49
2.4.5	Canada .....	52
2.5	SUMMARY .....	53
	CHAPTER 3.....	54

	AN OVERVIEW OF STRATEGIES TO PREVENT COPPER CABLE THEFT .....	54
3.1	INTRODUCTION .....	54
3.2	AN OVERVIEW OF LEGISLATION PERTAINING TO COPPER THEFT IN SOUTH AFRICA.....	54
3.2.1	The Constitution of the Republic of South Africa, 1996 .....	54
3.2.2	The Second-Hand Goods Control Act 6 of 2009 .....	55
3.2.3	The Criminal Matters Amendment Act 18 of 2015 .....	56
3.2.4	Common Law .....	57
3.2.5	Criminal Procedure Act 51 of 1977 .....	58
3.2.6	The Prevention of Organised Crime Act 121 of 1998 .....	59
3.2.7	The Prevention and Combating of Corrupt Activities Act 12 of 2004 .....	59
3.3	PROMINENT ROLE-PLAYERS IN THE COMBATING OF COPPER CABLE THEFT IN SOUTH AFRICA.....	59
3.3.1	The South African Police Service .....	59
3.3.2	Non-Ferrous Metals Crime Combating Committee.....	61
3.3.3	Combined Private Investigations .....	63
3.3.4	Eskom.....	63
3.3.5	Passenger Rail Agency South Africa .....	64
3.3.6	Metrorail.....	65
3.3.7	Telkom.....	65
3.4	AN OVERVIEW OF INTERNATIONAL MEASURES TO ADDRESS COPPER CABLE THEFT .....	66
3.4.1	United States of America .....	66
3.4.2	United Kingdom .....	69
3.4.3	France .....	70
3.4.4	Italy .....	71
3.4.5	Germany.....	72

3.4.6	Bulgaria .....	72
3.4.7	South Africa .....	73
3.5	<i>MODUS OPERANDI</i> .....	77
3.6	SUMMARY .....	80
CHAPTER 4 .....		81
PRESENTATION OF RESEARCH FINDINGS.....		81
4.1	INTRODUCTION .....	81
4.2	RESULTS ORIGINATING FROM INTERVIEW WITH SAMPLE GROUP A	82
4.2.1	Theme 1: Participant perceptions/awareness of damage caused by copper cable theft .....	83
4.2.2	Theme 2: Planning copper cable theft .....	87
4.2.3	Theme 3: Training for the offence.....	89
4.2.4	Theme 4: The motivation and incentive to commit copper cable theft .....	90
4.2.5	Theme 5: Facilitating/reinforcing factors for copper theft .....	92
4.2.6	Theme 6: Executing the alleged offence.....	93
4.3	RESULTS ORIGINATING FROM INTERVIEW WITH SAMPLE GROUP B	95
4.3.1	Theme 1: Participants' perceptions of the aims and objectives of the NFMCCC .....	96
4.3.2	Theme 2: Participant perceptions of the NFMCCC achieving its aims and objectives to combat copper theft .....	97
4.3.3	Theme 3: Challenge/constraints faced for successful implementation ..	98
4.3.4	Theme 4: The nature of the expected multi-faceted co-operative relationship, interaction and working agreements with stakeholders .....	102
4.3.5	Theme 5: External operational challenges to the NFMCCC for combatting copper cable theft .....	105
4.3.6	Theme 6: The operationalisation of the NFMCCC in an integrated manner .....	106



4.4	RESULTS ORIGINATING FROM INTERVIEW WITH SAMPLE GROUP C....	108
4.4.1	Theme 1: CPI participants' perceptions of the aims and objectives of the NFMCCC.....	110
4.4.2	Theme 2: Participant perceptions of the NFMCCC achieving its aims and objectives to combat copper cable theft.....	111
4.4.3	Theme 3: Engagement in multi-faceted co-operative relationships, interaction and working agreements with stakeholders to facilitate, identify and sustain policing strategies to combat copper cable theft.....	114
4.4.4	Theme 4: The nature of planned strategies for achieving the goal.....	116
4.4.5	Theme 5: Effective strategy implies knowledge of crime and product and legal matters.....	120
4.4.6	Theme 6: Participant perceptions of the NFMCCC continuously developing and implementing strategies to address identified shortcomings or to improve on existing strategies.....	122
4.4.7	Theme 7: The need for co-ordination of integrated strategies.....	123
4.4.8	Theme 8: Operational relationships between the NFMCCC and other stakeholders.....	124
4.4.9	Theme 9: Factors hindering the successful implementation of policing strategies by the NFMCCC to address copper cable theft.....	127
4.4.10	Theme 10: The NFMCCC monitoring and co-ordinating crime-combating operations in an integrated manner.....	134
4.4.11	Theme 11: NFMCCC efficiency and functionality in relation to the prevention of copper cable theft.....	136
4.5	RESULTS ORIGINATING FROM INTERVIEW WITH SAMPLE GROUP D....	136
4.5.1	Theme 1: Participants perceptions of the aims and objectives of the NFMCCC.....	139
4.5.2	Theme 2: Participant perceptions of the NFMCCC achieving its aims and objectives to combat copper cable theft.....	139

4.5.3	Theme 3: Participant perceptions of planned intervention strategies by the NFMCCC to combat copper cable theft in South Africa.....	140
4.5.4	Theme 4: NFMCCC's engagement in multi-faceted co-operative relationships, interaction and working agreements with stakeholders ...	142
4.5.5	Theme 5: Diverse experiences of operational relationship between the NFMCCC and other stakeholders.....	145
4.5.6	Theme 6: Factors that hinder the successful implementation of policing strategies implemented by the NFMCCC .....	147
4.5.7	Theme 7: Participant perceptions of the NFMCCC's continuous evaluation and adaptation/development and implementation of strategies to address identified shortcomings to improve on existing strategies.....	151
4.5.8	Theme 8: NFMCCC's monitoring and co-ordination of crime combating operations.....	153
4.5.9	Theme 9: Participant perceptions about an efficient link between NFMCCC, police stations, government departments and other stakeholders .....	154
4.5.10	Theme 10: Functionality of the NFMCCC .....	155
4.6	SUMMARY .....	156
	CHAPTER 5 .....	157
	INTERPRETATION OF THE RESEARCH FINDINGS .....	157
5.1	INTRODUCTION .....	157
5.2	SAMPLE GROUP A – AWAITING TRIAL DETAINEES (DETAINED ON CHARGES OF COPPER THEFT) AT POLLSMOOR CORRECTIONAL CENTRE, WESTERN CAPE .....	158
5.2.1	Theme 1: Participant perceptions/awareness of damage caused by copper cable theft.....	158
5.2.2	Theme 2: Planning the copper cable theft .....	159
5.2.3	Theme 3: At the wrong place at the wrong time .....	159
5.2.4	Theme 4: The motivation and incentive to commit copper cable theft .....	160

5.2.5	Theme 5: Facilitating/reinforcing factors for copper cable theft .....	161
5.2.6	Theme 6: Executing the alleged offence.....	161
5.2.7	Theme 7: Perceptions of the protection of copper cables – effectiveness of security and protection measures .....	162
5.3	SAMPLE GROUP B – BUSINESS AGAINST CRIME SOUTH AFRICA.	163
5.3.1	Theme 1: BACSA participant perceptions of the aims and objectives of the NFMCCC .....	163
5.3.2	Theme 2: Participant perceptions of the NFMCCC achieving its aims and objectives to combat copper cable theft.....	164
5.3.3	Theme 3: Challenges/Constraints to successful implementation.....	164
5.3.4	Theme 4: The nature of the expected multi-faceted co-operative relationships, interaction and working agreements with stakeholders ....	165
5.3.5	Theme 5: Additional external operational challenges to the NFMCCC and its copper theft prevention aim.....	167
5.3.6	Theme 6: The operationalisation of the NFMCCC in an integrated manner .....	168
5.4	SAMPLE GROUP C – CPI PRIVATE INVESTIGATORS .....	168
5.4.1	Theme 1: CPI participant perceptions of the aims and objectives of the NFMCCC .....	168
5.4.2	Theme 2: Participant perceptions of the NFMCCC achieving its aims and objectives to combat copper cable theft.....	169
5.4.3	Theme 3: Engagement in multi-faceted co-operative relationships, interaction and working agreement with stakeholders to facilitate and sustain policing strategies to combat copper cable theft.....	170
5.4.4	Theme 4: The nature of the strategies planned for achieving the goal .....	170
5.4.5	Theme 5: Effective strategy implies knowledge of the crime, product, and legal matters .....	173

5.4.6	Theme 6: Participant perceptions of the NFMCCC continuously developing and implementing strategies to address identified shortcomings or to improve on existing strategies .....	173
5.4.7	Theme 7: The need for co-ordination of integrated strategies .....	174
5.4.8	Theme 8: Operational relationship between the NFMCCC and other stakeholders .....	175
5.4.9	Theme 9: Factors hindering the successful implementation of policing strategies implemented by the NFMCCC to address copper cable theft	175
5.4.10	Theme 10: The NFMCCC monitoring and co-ordinating crime combating operations in an integrated manner .....	176
5.5	SAMPLE GROUP D – MPUMALANGA AND GAUTENG PROVINCIAL NFMCCC .....	176
5.5.1	Theme 1: Participant perceptions of the aims and objectives of the NFMCCC .....	176
5.5.2	Theme 2: Negative or doubtful that the Forum achieve its aims and objectives.....	177
5.5.3	Theme 3: Perceptions of planned intervention strategies of the NFMCCC to combat copper cable theft in South Africa .....	178
5.5.4	Theme 4: NFMCCC's engagement in multi-faceted cooperative relationships, interaction and working agreements with stakeholders ...	178
5.5.5	Theme 5: Diverse experiences of operational relationships between the NFMCCC and other stakeholders.....	179
5.5.6	Theme 6: Factors that hinder the successful implementation of policing strategies implemented by the NFMCCC .....	179
5.5.7	Theme 7: Perceptions on the NFMCCC's continuous evaluation and adaption, development, and implementation of strategies to address identified shortcomings to improve on existing strategies.....	180
5.5.8	Theme 8: NFMCCC's monitoring and co-ordinating of crime combating operations.....	181

5.5.9	Theme 9: Perceptions about an efficient link between NFMCCC, police stations, government departments and other stakeholders .....	181
5.5.10	Theme 10: Functionality of the NFMCCC .....	182
5.6	SUMMARY .....	182
	CHAPTER 6 .....	184
	CONCLUSIONS AND RECOMMENDATIONS .....	184
6.1	INTRODUCTION .....	184
6.2	A SYNOPSIS OF THE FOREGOING CHAPTERS.....	184
6.3	RECOMMENDATIONS .....	186
6.3.1	Recommendations for the South African Police Service.....	187
6.3.2	Recommendations for utility companies on hardening copper cable theft targets.....	189
6.3.3	Recommendations enforcing firmer legislation regulating licensed scrap metal dealers .....	190
6.4	CONCLUSION.....	191
	LIST OF REFERENCES .....	192

**LIST OF ANNEXURES:**

ANNEXURE A:	CERTIFICATE CONFIRMING EDITING AND FORMATTING....	207
ANNEXURE B:	APPROVAL LETTER FROM BACSA .....	208
ANNEXURE C:	APPROVAL LETTER FROM CPI .....	216
ANNEXURE D:	PERMISSION TO CONDUCT RESEARCH IN SAPS: MPUMALANGA .....	224
ANNEXURE E:	DECLARATION BY INDEPENDENT CODER .....	225
ANNEXURE F:	ETHICS APPROVAL.....	226

ANNEXURE G: APPROVAL TO CONDUCT RESEARCH IN THE DEPARTMENT OF CORRECTIONAL SERVICES .....	228
ANNEXURE H: INTERVIEW SCHEDULE POLLSMOOR CORRECTIONAL FACILITY .....	229
ANNEXURE I: INTERVIEW SCHEDULE: NFMCCC, BACSA & CPI .....	231
ANNEXURE J: PERMISSION TO CONDUCT RESEARCH IN SAPS: PRETORIA .	235
ANNEXURE K: PERMISSION TO CONDUCT RESEARCH IN SAPS: GAUTENG .....	238
ANNEXURE L: UNISA COVID-19 POSITION STATEMENT ON RESEARCH ETHICS.	243

**LIST OF TABLES:**

Table 2.1	Transnet copper cable theft analysis from 2008/09 to 2011/12 .....	28
Table 2.2	National overview of copper cable theft per province (2011).....	31
Table 2.3	Number of copper theft incidents registered at the top three police stations within the top five cluster precincts in Gauteng during 2011 .....	32
Table 2.4	Number of copper theft incidents registered at the top three police stations within the top five Cluster precincts in the Western Cape during 2011 .	32
Table 2.5	Number of copper theft incidents registered at the top three police stations within the top five cluster precincts in Mpumalanga during 2011.....	33
Table 4	(Sample Group A) .....	82
Table 4	(Sample Group B) .....	95
Table 4	(Sample Group C) .....	108
Table 4	(Sample Group D) .....	136

**LIST OF FIGURES:**

Figure 2.1	Transnet copper cable theft incidents .....	29
------------	---	----

Figure 2.2 Transnet copper cable Theft losses comparative statistics from 2008/09 to 2011/12 .....29

Figure 2.3 USA Copper and Copper Alloy End Users in 2002: .....43

**LIST OF DIAGRAMS**

DIAGRAM 1: Government stakeholders in the NFMCCC .....3

DIAGRAM 2: Industry stakeholders in the NFMCCC .....4

DIAGRAM 3: Non-ferrous metal theft Value Chain (as adapted from Robertson (2018)) .....5

## CHAPTER ONE

### GENERAL ORIENTATION

#### 1.1 INTRODUCTION

This chapter's content is intended to serve as a general orientation and focuses on the researcher's research methodology. The chapter content provides a contextual background and underlines the dynamics and challenges presented by copper cable theft syndicates and individual offenders. Both the latter and former pose substantial challenges to the South African economy and the South African Police Service (SAPS), parastatals, and the private security industry. The research problem statement identifies the research focus, namely, the pandemic level of non-ferrous metals-related crimes, and the impact thereof on the South African economy, society, and critical infrastructure, which impacts various industries, including local government energy, transport, and mining.

Further, the researcher presents the research aim and questions explored in this study and the proposed value. The research design, approach, population, and sampling methods are then discussed. Moreover, the researcher describes the procedure used to gather data and deliberates using a case study as the preferred research design. A preliminary literature review of the topic under investigation is also presented. The researcher then explains the data analysis method used to analyse the gathered data. This chapter concludes with a discussion of the ethical principles observed during the research study.

#### 1.2 BACKGROUND TO THE STUDY

According to Coetzee (2013:2), *"...the original Non-Ferrous Theft Combating Committee (NFTCC) was formed in 1993 to address non-ferrous metal theft"* in South Africa. Influential organisations have been part of its membership over the years, but Business Against Crime South Africa (BACSA), the SAPS, Eskom, Telkom, and Transnet remain at the core of the Committee. Various sectors from the metal recycling industry, the mining industry, and corporations such as Johannesburg City Power have, from time to time, collaborated with the Committee. In essence:

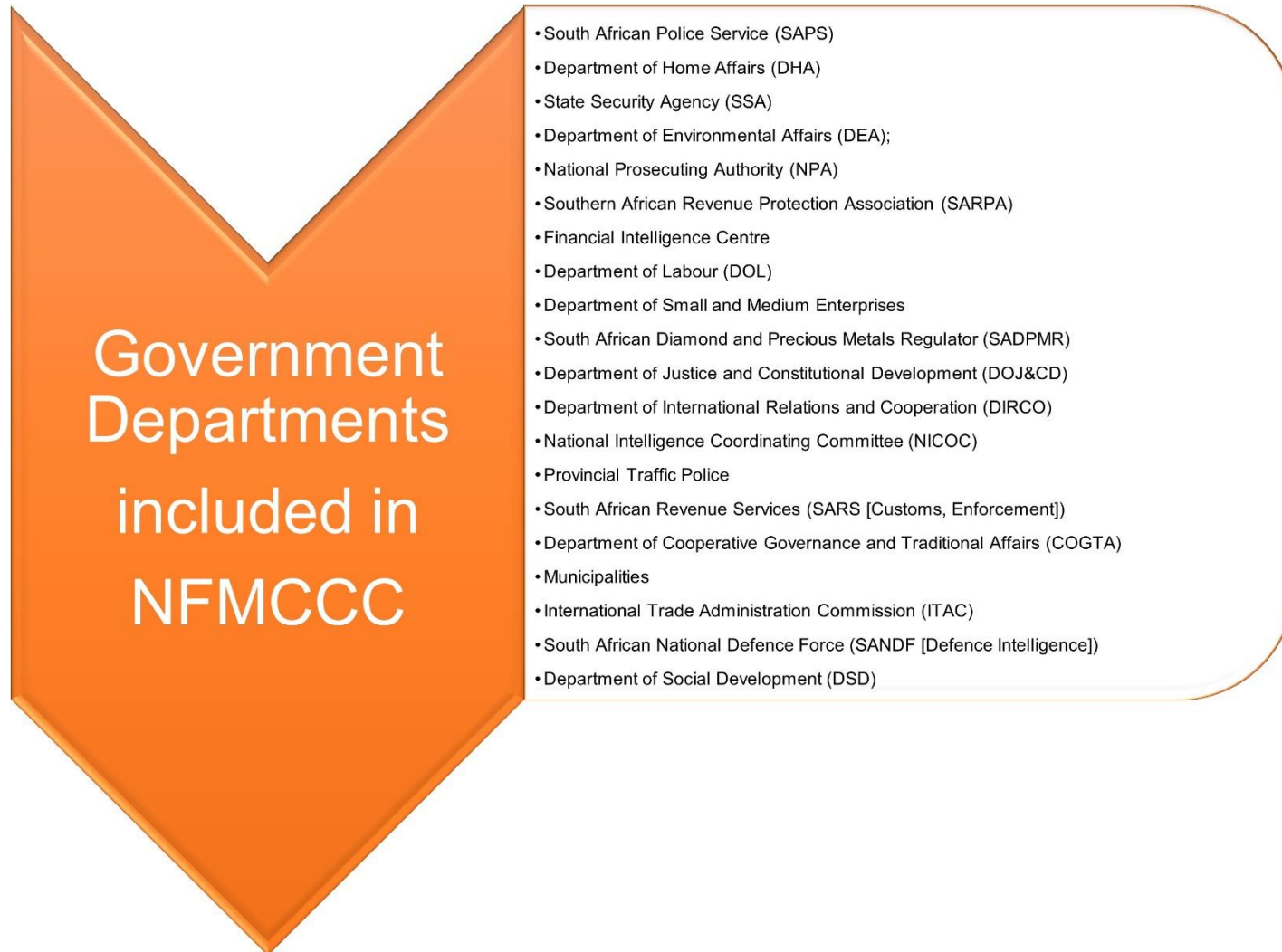


*The (NFTCC) is an integrated body of key role-players that provides strategic guidance and direction for the process of prevention and eradication of theft of non-ferrous metal so that quality of supply of strategic services can be ensured to the benefit of all the people in South Africa (Geldenhuys, 2008:1).*

The NFTCC is contemporarily known as the Non-Ferrous Metals Crime Combating Committee (NFMCCC) and is now managed by the SAPS. The NFMCCC has a specific focus: to address specific crime (non-ferrous metal theft) and other related crimes on both national and provincial levels by implementing a joint venture between relevant stakeholders. The NFMCCC is also mandated to co-ordinate integrated crime combating operations focusing on suppliers, dealers, and end-users (Coetzee, 2013:3).

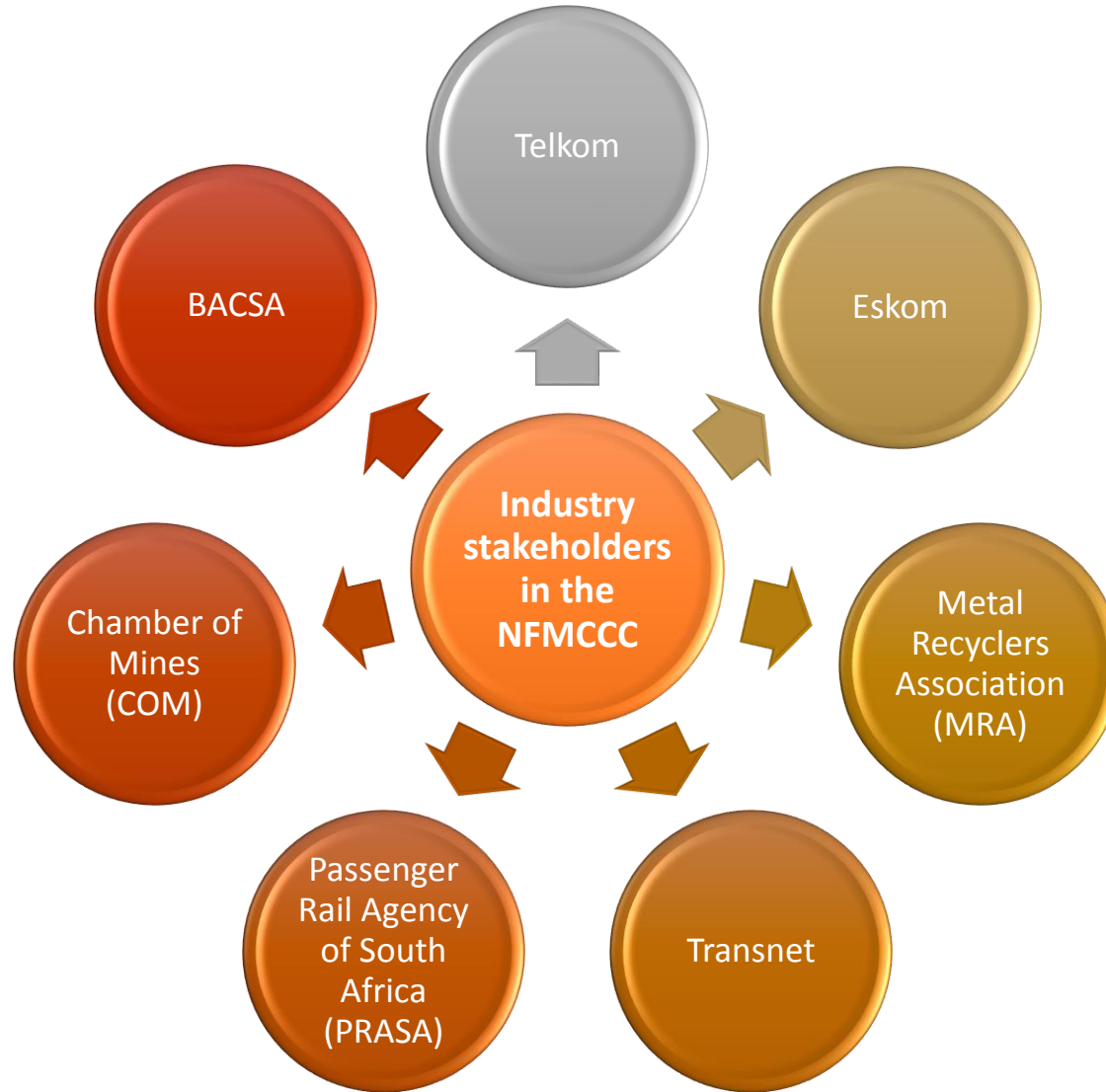
The SAPS Annual Report for 2014/2015 (SAPS, 2015: 157-158) stipulates that the National NFMCCC meets once a quarter, as do the nine Provincial NFMCCCs to share information between role-players and to operationalise initiatives to address non-ferrous metal-related crime. The theft of and illicit trade in non-ferrous metals is facilitated by individuals and groups operating at various levels of the non-ferrous metals' theft value chain (SAPS, 2015: 157-158). The identified stakeholders in combating these crimes include role-players in government, industry, and state institutions; but the SAPS is the lead department. In September 2014, the various role-players in the NFMCCC developed a non-ferrous metals theft value chain. According to Robertson (2018), the value chain comprises five tiers ranging from local to international role-players and has been developed with level 1 representing individual and syndicate operatives, and level 5 representing international and transnational syndicates. The following government stakeholders form part of the NFMCCC:

**DIAGRAM 1: Government stakeholders in the NFMCCC**



The following industry stakeholders, including mining, security and state-owned companies, form part of the NFMCCC:

**DIAGRAM 2: Industry stakeholders in the NFMCCC**



The non-ferrous metals theft value chain, initially illustrated by Robertson (2018), is produced below with adaption by the researcher.

**DIAGRAM 3: Non-ferrous metal theft Value Chain (as adapted from Robertson (2018))**



Non-ferrous metals-related crimes, such as copper theft, were previously regulated by the Second-Hand Goods Act 23 of 1955 but are now regulated by the Second-Hand Goods Act 6 of 2009. The SAPS Annual Report of 2016/2017 (SAPS, 2017:122) reports that Second-Hand Goods Dealers' Forums have been established in the majority policing areas to reduce property-related crimes through information sharing and serve as a platform to establish co-operation and communication between the SAPS and the second-hand goods industry. The SAPS Directorate for Priority Crime Investigation (DPCI) incorporates the National Operational Committee and Provincial Operational Committees. Their function is to effectively operationalise the functioning of the NFMCCC through disruptive operations in an intelligence-led and integrated manner (SAPS, 2017:122). Therefore, to facilitate improved policing strategies, it is of utmost importance that the SAPS follows a holistic approach whereby stakeholders and private investigators in the copper industry, e.g., CPI and the Executive International Forensics Investigators; collectively co-operate and identify policing strategies to address copper theft.

Thelwell (2014:3) explains why copper is such an attractive metal for copper thieves. He opines that with the advent of industrialisation in the late eighteen-hundreds, copper became essential for constructing buildings and power generation operations “...because it is the best conductor of heat and electricity of all metals (except for silver).” According to the Copper Development Association Africa (CDAA), the average home contains 180 kilograms of copper which facilitate electrical wiring, water pipes, and appliances. Copper has a useful life of more than half a century which further makes it an attractive asset. Most industrialisation efforts, and the building of infrastructure, rely on copper. As News 24 (2014:2) quoting the Institute for Security Studies points out, as a result of electricity, small businesses and home industries have transformed into large factories; this has, in turn, created the need for copper-based railways for distribution, and copper-based telephone systems for communications. Copper is commonly found in widely industrialisation and infrastructure projects, and resultantly, is often seen as a thermometer for the global economy. A cooling in copper price indicates a drop-off in demand to build infrastructure, which does not bode well for the economy. According to Torkelson (2010:1), copper's price hit a 60-year low in 1999 as demand from post-industrial societies slowed. However, in the last decade, China's rapid industrialisation has again spurred copper prices, which reached an all-

time high of just above \$10 000 a ton in mid-February 2011. According to the latest figures from the International Copper Study Group (ICSG), “*China is the largest consumer of refined copper accounting for 40 per cent of world demand.*” The demand for copper has created robust international trade, while the market for illicit copper has increased alongside the legal demand. According to the SACCI Copper Theft Barometer, copper theft costs the economy between R 5 billion (\$415 million) and R 7 billion (\$581 million) a year (SAPA, 2014).

Copper theft is also an international phenomenon. According to Evans (2011), crime statistics from the Welsh railways, for example, indicate that copper theft is a conspicuous area of growth, which has escalated by 168 per cent. However, Evans emphasises that Wales is not the only territory in the United Kingdom (UK) that has experienced significant copper theft challenges. Similarly, there is an epidemic of copper cable theft crimes across the UK's railway network, although the crime is not restricted to the railways. Essentially any industry which makes use of copper cabling is vulnerable, including electricity substations and building sites. The consequences of copper cable theft can be severe and could result in rail-transport disruptions, rolling blackouts, and the loss of phone and internet services, for example.

Evans (2011) explains the increase in copper cable theft as follows:

- i. The price of copper has escalated in the last two years, driven by booms in construction and industrial investment in China and India.*
- ii. The cash price of copper on the London Metal Exchange (LME) was less than \$ 3000 per ton at the start of 2009. In 2011, it was more than \$ 9000 per ton and breached the \$ 10 000 per ton barrier later in 2011. For that kind of money, criminals will take risks, even with the knowledge of the life-threatening risk of 11 000 volts of electricity involved in copper cable theft.*

Copper theft has also risen sharply in the United States of America (USA) in recent years. In 2008, the Federal Bureau of Investigation (FBI) warned that copper thieves target electrical substations, cellular towers, telephone landlines, railroads, water

wells, construction sites and vacant homes (Evans, 2011). Despite the FBI's warning, figures from the National Insurance Crime Bureau (NICB) show that the number of reported copper thefts in the USA “...more than doubled from 13 020 in 2006-2008, to 32 568 in 2010-2012. Copper has always been liable to this kind of predation since it has a high value” (Evans, 2011). Copper is easily recycled by scrap-metal dealers because it is used in an almost pure form in infrastructure, which contributes to phenomenon of cable-theft. Unsurprisingly, most copper in circulation today has been recycled many times, and present-day mining adds extraordinarily little fresh material to global stocks. There is, therefore, “...a continually active market for recycled copper into which criminals can leak stolen cabling” (Evans, 2011).

According to McNees (2017:6), there were 28 040 insurance claims for the theft of copper, bronze, brass, or aluminium submitted to International Standardization Organization (ISO) Claim Search between January 1, 2014, and December 31, 2016. Of the 28 040 total claims, the vast majority (98%) pertained to copper theft in the USA. Of these claims, 65 per cent were made against personal insurance policies, while 35 per cent were against commercial policies. A statistically significant positive correlation was found when the number of metal theft claims and copper prices were compared. It should be noted that the price of copper began to climb again in November 2016 and approached an average of \$ 3 per pound by August 2017 which had a direct impact on the cost of insuring copper interests. The latter problem continues unabated.

## **1.2 PROBLEM STATEMENT**

According to De Vos, Strydom, Fouche and Delport (2011:108), a problem statement clearly describes the issue under investigation. In this study, the issue under investigation is the impact of the NFMCCC on copper theft in South Africa. Mouton (2014:107) states that a well-defined research problem is a pre-condition for any study. In line with Mouton's writings, the identified research problem in this study will be comprehensively defined. According to Dantzker and Hunter (2000:44), a problem statement identifies the research problem being addressed and defines research questions that the researcher is trying to answer. Dantzker, Hunter and Quinn (2016:14) further state that one of the most critical steps is recognising and defining what will be studied before starting a research project.

Wentz (2017:2) supports the authors' statement above and opines further that the problem statement drills down from the research topic towards a solution. The idea that you are solving a *problem* suggests the problem can be solved. In some cases, however, research results do not necessarily solve the problem but contribute to understanding it better. Maxfield and Babbie (2017:19) argue that one of the most important, yet surprisingly tricky parts of the research process is specifying and framing your interest in a particular problem or question. In other words, what are you interested in understanding? For this study, the problem to be explored is the impact of the NFMCCC on the combating of copper cable theft in South Africa.

According to the SAPS Annual Report of 2014/2015 (SAPS, 2015:158), an increase of non-ferrous metals-related crimes has raised concerns for South Africa's economy, society, and critical infrastructure; various industries including local government, energy, transport, and mining. Intelligence-driven operations have been initiated in all provinces to combat non-ferrous metal-related crimes and reduce copper cable theft in South Africa. According to Scheepers (2013:3), copper is widely available, poorly secured, and easy to steal due to the extensive range covered by mine power networks. It is also easy to sell despite implementing what appears to be a controlled process for copper sale in South Africa. There are thousands of scrap metal dealers or *bucket shops* willing to trade in copper illicitly.

The SAPS Annual Report 2014/2015 (SAPS, 2015:156) illustrates that the SAPS Second-Hand Goods Control Section is responsible for the following:

- i. Maintaining governance in co-operation with SAPS Legal Services.
- ii. Maintaining National and Provincial NFMCCCs.
- iii. Maintaining mechanisms, such as training for the effective identification of non-ferrous metals.
- iv. Sustaining an integrated approach between relevant stakeholders.
- v. Co-ordinating compliance, as well as crime combating operations.
- vi. Monitoring the import and export of non-ferrous metal.
- vii. Monitoring investigations of non-ferrous metal related crimes.
- viii. Maintaining fixed structures on national and provincial levels and conducting a non-ferrous metals analysis to determine crime threat tendencies.



However, from the researcher's experience with copper theft investigation, a significant shortcoming in the policing of copper theft is that the SAPS and all other stakeholders that form part of the NFMCCC address copper theft in isolation and do not holistically engage with other stakeholders in the copper industry to identify policing strategies to curb copper theft. Resultantly, the SAPS, and stakeholders in the copper industry work in silos resulting in non-sharing of crime information, the loss of crucial evidence, and an inability to link similar cases committed in different areas. Based on the identified research problem explained above, the researcher will specifically evaluate the impact of the NFMCCC in its quest to combat copper theft in South Africa.

According to the South African Chamber of Commerce and Industry's (SACCI) acting CEO, Peggy Drodskie the May 2015 statistics on stolen copper in South Africa were 2.38 per cent lower than in April 2015; and 6.1 per cent lower than the previous year. However, the copper theft volume increased to 180 metric tons in May 2015, from 179 metric tons in April 2015. According to South Africa's electricity provider, Eskom (Drodskie, 2018) 8 988 cable theft incidents were reported between 2012 and 2016.

At a South African cabinet meeting on 24 June 2015 the Criminal Matters Amendment Act 18 of 2015 was approved for tabling in Parliament. The amendments provide changes to the law on infrastructure-related offences, such as cable theft and the theft of telephone lines. Stricter provisions are provided for the granting of bail and sentencing of offenders. The Amendment Act created a new offence that criminalises damaging essential infrastructure by tampering or interfering with the functioning of basic services through criminal activity. According to the SAPS Annual Report (2016/2017 (SAPS, 2017:122), the Criminal Matters Amendment Act came into effect on 1 June 2016. The purpose of the Criminal Matters Amendment Act is to address the increase in crimes affecting service delivery to the public, such as theft of copper cables and transformers, by creating a new dispensation for essential infrastructure-related offences. The Criminal Matters Amendment Act criminalises tampering with, damaging or destruction of essential infrastructures, such as installations, systems, structures, and facilities, which may interfere with providing essential services, such as transport, energy, water, sanitation, and communication.

Thelwell (2014:2) acknowledges a report by the SACCI, which revealed that copper theft increased by 26 per cent in 2013. Thelwell further illustrates the consequences of copper theft in South Africa reporting, "*Around 15 people were trapped under the rubble of a collapsed structure in Soweto*" after an attempted copper cable theft incident. In South Africa, scrap metal is often weighed for cash, and resultantly those in financial need will turn to nefarious means to access and appropriate copper illegally. According to the SAPS Annual Report 2016/2017 (SAPS, 2017:122), on average two copper cable thieves are electrocuted in South Africa each month, which goes to demonstrate the often-disastrous results of this type of criminal activity.

The phenomenon of copper theft in South Africa, and the strategies to address it have been identified for research purposes, not only for law enforcement but also for parastatals, such as Transnet and Eskom. Transnet and Eskom rely on copper as an essential infrastructure component that provides essential services to the public. As a result, copper theft has a significant impact on the South African criminal justice system. Copper theft and its impact on the South African criminal justice system is further confirmed by BACSA, in its National Strategy and Funding Proposal for 2012-2015 (BACSA, 2012). BACSA highlights that non-ferrous metal theft poses a serious threat to the South African criminal justice system and has done so for years.

Further, this form of criminal activity harms victims, not only financially, but through other consequential and associated losses. The theft of non-ferrous metals harms the private and public sectors, especially where there are consequential losses that cause a lack of essential services, such as telephone lines, electricity, and railway services. The loss of these services, in turn, harms productivity and profit margins.

According to BACSA (2012), the SACCI instituted a monthly barometer detailing copper theft cost to the country. From this, it was reported that the cost of copper theft increased to R 9.5 million in November 2013; however, SACCI hopes that improved policing will halt the increase in copper theft. In his State of the Nation Address (SONA) on 12 February 2015, former President, Jacob Zuma raised concerns regarding the "*...the extent and impact of copper theft in the country,*" and stated that copper cable theft must be "*...effectively addressed.*" The then President specifically mentioned that

copper theft negatively influences South Africa as a nation while emphasising that copper theft is a significant problem.

Although copper theft is a countrywide problem, the researcher has experienced Gauteng as the foremost basis for copper theft syndicates, which, in turn, affects all the other provinces. In 2006, Van Dalen, a City of Cape Town Councillor, initiated a specialised crime-fighting unit known as the Copperheads to deal with copper cable theft. The unit was phenomenally successful and brought the cost of copper theft down from R 22 million to just under R 500 000 during Van Dalen's term of office. According to Feni (2007:6), millions of rand in damages are caused in the Western Cape because of copper theft. The most significant losses are suffered by the electricity utility, Eskom, telecommunications provider, Telkom, and the SA Railway Services. The Local Government of Cape Town, together with the SACCI, requested the Western Cape Government to appoint a Commission of Enquiry and a task team to examine the impact of copper theft on the South African economy. In May 2007, a request for the appointment of a Commission of Enquiry into copper theft was put forward. According to Van Dalen (2017), during a preliminary discussion, the outcome of the Commission of Enquiry and Task team found:

- i. There is a significant problem with copper theft in the Western Cape.
- ii. Copper theft should be addressed with immediate effect using a focused approach.
- iii. A dedicated Unit was implemented in 2006, addressing copper theft and is still active.
- iv. This unit should gather statistics and data and address copper theft with a zero-tolerance approach.

According to Van den Berg, "*The theft of non-ferrous metals - copper, and aluminium in particular - is a severe problem in South Africa and has escalated to such an extent that losses run into millions of Rand annually*" (Van den Berg, 2007). Simpson, as quoted by Coetzee (2013:18), made it clear that non-ferrous metal theft is not merely a South African problem; it has become a global dilemma. For example, "*...non-ferrous metal thieves are stripping Italy in a red gold rush that has halted train services, damaged catacombs, and caused at least one blackout and the worldwide demand for*

*copper has sent prices spiralling to previously unimaginable highs” (Coetzee, 2013: 18-19).*

Copper cable theft harms the criminal justice system in South Africa and has a significant effect globally. South Africa is experiencing a significant economic challenge resulting from the high number of copper theft incidents. It is estimated that cable theft costs South Africa up to R 7 billion per annum, which negatively affects taxpayers. In addition, there is often a cost to human life as a result of these crimes. For example, two people died, nineteen were critically injured, and a further 281 sustained injuries, when two trains collided near Pretoria in January 2011. This accident was due to the theft of copper cables which disrupted the signalling system. This accident's financial cost was more than R 22 million, which directly impacted South Africa's economy since the State has a responsibility to subsidise these costs (Parks, 2015:2).

In 2010/11 Telkom reported that they suffered losses of up to R 183.5 million due to cable theft. In certain areas, Telkom has simply stopped replacing stolen cables due to high copper cable theft incidents. State utilities Eskom, Telkom, and Transnet reported combined losses of more than R 3.12 billion due to copper theft between 2006 and 2011. Workers' jobs at these parastatals are threatened, as they are drained of funds to repair the damages caused by copper cable theft. In addition, workers and companies suffer financial losses due to the constant train delays caused by cable theft (Parks, 2015:2).

The importance of researching this phenomenon is to evaluate the impact of the NFMCCC in combating copper theft and therein to identify shortcomings and challenges to address this crime.

#### **1.4 RESEARCH AIM**

According to De Vos *et al.* (2011:108), the study's aim indicates the research's central thrust, while the goals identify the specific issues of focus. The research aim “...is strongly interlinked to the problem statement to ensure that all the gaps will be addressed systematically” (Welman, Kruger & Mitchell, 2005:2).

This study aims to evaluate the impact of the NFMCCC on the combating of copper cable theft in South Africa. There is value in evaluating the impact of the NFMCCC on copper cable theft and ascertaining whether it has been successful and to what extent, and, if necessary, redirect the NFMCCC to improve its impact and ultimate effectiveness.

## **1.5 RESEARCH PURPOSE**

According to Welman *et al.* (2005:22), the purpose of the research is threefold. Firstly, it seeks to describe **how** things are, that is, define the nature of the study object. Secondly, it seeks to explain **why** things are the way they are; it may be so because one thing has caused another to change, for example. Lastly, the research seeks to establish **what** the relationship is between things and predict phenomena. Denscombe (2010:25) emphasises that there must also be a reason for conducting research.

Based on the pillars offered above by Welman *et al.* (2005:22), this study focuses on the following purposes:

- i. To describe the extent and impact of copper cable theft in South Africa.
- ii. To describe the impact of the NFMCCC on the combating of copper cable theft in South Africa.
- iii. To explore co-operation to combat copper cable theft between government and industry stakeholders who form part of the NFMCCC.
- iv. To investigate factors that hinder the implementation of effective policing strategies to address copper cable theft.
- v. To examine current policing strategies which seek to address copper cable theft.
- vi. To examine international best practices used to address copper cable theft.

## 1.6 RESEARCH QUESTIONS

According to Gray (2014:690), a research question “...is a specific formulation of a research project's issues.” Bernard (2018:55) posits five questions to ask about every research question one is considering pursuing. If one answers these questions honestly (at least to oneself), the chances are that the research produced will be of high quality. The five questions are:

- i. Does this topic (or research site, or data collection method) interest the researcher?
- ii. Is this a problem that is amenable to scientific inquiry?
- iii. Are adequate resources available to investigate this topic (to study this population at this particular research site, to use this particular data collection method)?
- iv. Will the research question, or the methods used, lead to irresolvable ethical problems?
- v. Is the topic of theoretical and/or practical interest?

Flowing from the above, the researcher seeks to answer the following primary research question: *What is the impact of the NFMCCC on the combating of copper cable theft in South Africa?*

The secondary research questions arising from the above are:

- i. What is the extent and impact of copper cable theft in South Africa?
- ii. Is the NFMCCC effective in addressing copper cable theft?
- iii. Do government and industry stakeholders, who form part of the NFMCCC, efficiently engage in co-operative relationships to combat copper cable theft?
- iv. What factors hinder the implementation of effective policing strategies to address copper cable theft?
- v. What policing strategies are currently implemented to address copper cable theft?
- vi. Could current policing strategies that address copper cable theft be enhanced?
- vii. Which international best practices effectively address copper cable theft?

## **1.7 KEY THEORETICAL CONCEPTS**

The following concepts are central to this study:

### **1.7.1 Theft**

According to Burchell (2006:782), theft consists of the “...*unlawful appropriation with intent to steal something capable of being stolen.*” In respect of its purpose and function, theft was initially defined as the “...*secretive taking and carrying away of property from the owner's possession and control.*” Snyman (2015:511) defines theft as the “...*unlawful and intentional removal [appropriation] of movable property [such as non-ferrous metals] belonging to another*” (for example, Eskom, Transnet).

For this study, theft shall be taken as referring to the unlawful and intentional appropriation of copper cable, primarily from the infrastructures of parastatals, local governments and the energy, telecommunication, transport, and mining industries, which thus deprive the legal owners of ownership.

### **1.7.2 Copper**

Copper is a non-ferrous metal and “...*the 25<sup>th</sup> most abundant element present in the earth's crust*” (Dodd, 2020:1). Semantically, copper is a “*Ductile, malleable, reddish-brown metallic element that is an excellent conductor of heat and electricity and is widely used for electrical wiring, water piping, and corrosion-resistant parts, either pure or in alloys such as brass and bronze*” (The Free Dictionary, 2020).

### **1.7.3 Copper dealer**

According to the Cambridge Dictionary (2020), a *dealer* is a company or person who buys or sells something.

For this study, an illicit copper dealer (excluding licensed agents) refers to a copper thief (individuals or organised syndicates) who sells copper that has been stolen from the infrastructure of various industries including local government, energy, transport, and mining to disreputable scrap metal dealers who knowingly buy stolen copper from these individuals.

#### **1.7.4 Non-Ferrous Metals**

According to Groover (2016:8), non-ferrous metals include other metallic elements and their alloys. In most cases, the alloys are more critical commercially than pure metals. Non-ferrous metals include pure metals and alloys of aluminium, copper, gold, magnesium, nickel, silver, tin, titanium, zinc, and other metals.

#### **1.8 VALUE OF THE RESEARCH**

The researcher undertook this study to improve the NFMCCC's efficacy by implementing a systematic pro-active plan that presents practical solutions to reduce copper cable theft in South Africa. The researcher hopes that the research will help the NFMCCC improve its impact on copper cable theft in South Africa.

The eventual research contribution will be made available to UNISA and the greater academic community, students, and curriculum development practitioners. It will also be available as a research source for students and researchers. The broader South African society will benefit if copper theft cases are undertaken professionally and timeously, resulting in a higher conviction rate and crime reduction. The reduction of copper theft and the increased conviction of perpetrators will benefit the country's economy since damage to utilities, such as Eskom, Telkom, and the SA Railway Services, could be limited and service delivery to their clients enhanced.

#### **1.9 RESEARCH APPROACH AND DESIGN**

According to Mouton (2014:35), research involves applying various standardised methods and techniques to pursue valid knowledge. Precisely because scientists aim to generate truthful knowledge, they are committed to using objective methods and procedures that increase validity based on qualitative methodologies. The development of a research design follows logically from the research problem and instructions to address the research problem. A research design's primary function is to enable the researcher to anticipate what the appropriate research decisions should be to maximise the validity of the eventual results (Mouton, 2014:36).



The researcher followed a qualitative research approach. Berg (2008:23) summarises qualitative research as research that seeks to answer questions by examining various social settings and the individuals who inhabit these settings.

The researcher followed a collective case study design. Creswell (2013:99) argues that in a collective case study, the researcher selects multiple cases. The multiple cases for this study included the following:

- i. Correctional Services, Pollsmoor.
- ii. Business Against Crime South Africa (BACSA).
- iii. Private investigators integrally involved with copper theft, i.e., Combined Private Investigations (CPI).
- iv. Mpumalanga Provincial NFMCCC.
- v. Gauteng Provincial NFMCCC.

The main benefits of a collective case study are the opportunities it creates for exchanges among researchers, forensic investigators, and decision-makers thus ensuring that they apply the research results (Innvær, Vist, Trommald & Oxman, 2002:239).

#### **1.10 DEMARCATION OF THE STUDY**

This study was delineated to include awaiting trial detainees on charges relating to copper theft at the Pollsmoor Correctional Service Centre. In addition, this study was demarcated to BACSA, CPI, the Mpumalanga Provincial NFMCCC and the Gauteng Provincial NFMCCC.

#### **1.11 POPULATION AND SAMPLING PROCEDURE**

Gray (2014) defines a population as “...*the totality of people, organisations, objects, or occurrences from which a sample is drawn.*” The inclusion of all provincial NFMCCCs and investigators in South Africa involved in the pro-active management and reactive investigation of copper theft would be the ideal population to explore the research problem comprehensively. Practically, however, interviewing all role-players would be near impossible, and therefore the researcher reverted to a sample of the population consisting of role-players and forensic investigators attached to the investigation of copper theft-related cases.

Most empirical studies involve selecting a group from which propositions will be advanced (Flick, 2011:70). The researcher applied non-probability sampling; in particular, purposive sampling, to select participants from the following sample:

- Detainees awaiting trial on charges of copper theft at Pollsmoor Correctional Centre, Western Cape.
- National NFMCCC.
- Mpumalanga and Gauteng Provincial NFMCCC.
- BACSA, who is a founder of the original NFTCC.
- CPI private investigators: *“CPI is a corporate investigation firm, specialising in investigating non-ferrous metal theft, explicitly focusing on syndicates targeting electrical networks. It supports the majority of the South African electricity supply companies as well the railway networks. In addition, CPI secures and tracks high-value cargo, with its unique, robust locking mechanisms and its top of the range tracking device, for both road and rail transportation and logistics agents. It further investigates hi-jacking or theft of any non-ferrous metal or high valued cargo and prides itself in its excellent recovery levels. Currently, CPI is the sole supplier of investigations to parastatals within South Africa, addressing copper cable and conductor theft. CPI has a national footprint addressing copper theft. Its services include but are not limited to: air support for tracking and tracing (privately owned helicopter), investigation of all copper/non-ferrous metal thefts for large entities and state-owned companies, investigation of energy thefts (illegal connections/theft of electricity), security risk assessments, escorting high-value commodities, information gathering on syndicates in order to apprehend and prosecute, capturing information gathered on an intelligence database, and deployment of undercover agents for corporate entities”* (CPI, 2019).

## **1.12 DATA COLLECTION**

In social science research, there are three primary forms of data collection: one can collect data by asking people (surveys and interviews), observing, or studying documents (Flick, 2011:104). The researcher used in-depth interviews to collect data for this research.

An in-depth interview is a loosely structured interview. It allows freedom for both the interviewer and the interviewee to explore added points and change direction, if necessary. In-depth interviews offer the opportunity to capture rich, descriptive data about people's behaviours, attitudes, and perceptions, and unfolding complex processes. Strategies are elegant in design, relying on a seemingly simple method for gathering data (Marshall & Rossman, 2011:91). In-depth interviews are typically conducted face-to-face so that rapport can be created with participants. The theoretical roots of in-depth interviewing are what is known as the interpretive tradition. According to Kumar (2019:239), in-depth interviewing involves repeated face-to-face encounters between the researcher and informants directed towards understanding informants' perspectives on their lives, experiences, or situations expressed in their own words. This definition underlines two essential characteristics of in-depth interviewing: it involves face-to-face, repeated interaction between the researcher and their informant(s); and it aims to understand the latter's perspective. Because this method involves repeated contacts (and hence an extended length of time spent with an informant), it is assumed that the rapport between the researcher and informant will be enhanced and that the corresponding understanding and confidence between the two will lead to in-depth and accurate information. Successful in-depth interviewers listen rather than talk. They have a clear line of questioning and use body language to build rapport. The interview is more of a guided conversation than a staccato question and answer session. The in-depth interview is conducted using a discussion guide, facilitating an exploration of participant views through open-ended questioning (Berman, 2017:5).

The in-depth interviews were conducted face-to-face with CPI investigators and accused copper cable thieves awaiting trial at the Pollsmoor Correctional Centre. This phase of the interview process took place prior to the state of national disaster arising from the COVID-19 pandemic. However, the next phase of the interview process took place during the state of national disaster arising from the COVID-19 pandemic. The researcher took cognisance of and adhered to UNISA's COVID-19 Position Statement on Research Ethics (UNISA, 2020) which stipulates that a responsible human participant research approach is required in the context of COVID-19. The COVID-19 Position Statement prohibited face-to-face interviews – for the duration of the lockdown

period – because they posed an inherent risk to participants and/or researcher. This condition was adhered to in the interest of participants and researchers. The researcher complied with the principles prescribed by UNISA's COVID-19 Position Statement on Research Ethics, as indicated below:

- i. While conducting research, clear, practical risk mitigation measures were taken to protect the participants, the community, the researcher, and research support staff.
- ii. The researcher assessed the research study's risk-benefit ratio, particularly concerning face-to-face contact and data collection in public spaces or locations where social distancing cannot be practised.
- iii. The right to self-determination was respected and always carefully considered. This approach included the participants' right to withdraw, right to decline to participate, and right to explore alternative participation methods.

Consequently, the researcher conducted in-depth interviews with participants from the NFMCCC and BACSA via Skype to ensure social distancing. The Skype interviews mitigated the risks inherent in conducting face-to-face interviews and presented zero risks of COVID-19 infection. All interviews were recorded electronically for transcription and data analysis purposes.

### **1.13 DATA ANALYSIS**

The researcher applied qualitative content analysis to analyse collected data. According to Dantzker *et al.* (2016:64), content analysis is used to gain insights into an event or phenomenon. The qualitative content analysis emphasises verbal rather than statistical analysis of communication. For example, Klinger and Brunson (2009:93) conducted an analysis of detailed accounts by police officers of how they perceived events during incidents involving the use of lethal force. According to Maree (2001) “*Qualitative data analysis tends to be an on-going and iterative (non-linear) process; this implies that data collection, processing, analysis, and reporting are intertwined, and not merely several successive steps*” (Maree, 2001:99).

Creswell (2013:182) believes that the data analysis process conforms to a general contour, which the author represents as a data analysis spiral. Creswell justifies the analysis spiral because the researcher engages in moving “...*in analytic circles, rather*

*than using a fixed linear approach.*” Creswell further explains that the researcher “...enters with data or text and exits with an account or a narrative.” In between, as Creswell describes, the researcher touches on several facets of analysis and circles round and around.

The researcher applied the following steps of the data analysis spiral, as described by Creswell (2013:182-184) to the analysis of data collected for this study:

**a. Organising the data**

The researcher commenced with data management by organising the data into manageable files. These files were further converted to appropriate text units (e.g., words, sentences, and themes).

**b. Reading and memorising**

To get a sense of the entire database, the researcher read the transcripts in their entirety numerous times. This process enabled the researcher to divide the data into chunks. During this data division, the researcher identified vital concepts that emerged from the data and formed categories and supporting evidence to represent various perceptions about each category.

**c. Describing, classifying, and interpreting data into codes and themes**

This step involved describing, classifying, and interpreting the data. In this loop of the spiral, the researcher developed categories to build detailed descriptions and themes and provide interpretations according to the researcher's views or the literature's perspectives. The researcher continued with the process of data coding to aggregate the text into smaller categories of information. Classifying the data by taking the qualitative information apart and looking for categories and themes followed data coding.

**d. Interpreting the data**

To make sense of the larger meaning of the data, the researcher interpreted the data.

**e. Representing and visualising the data**

In this final phase of the data analysis spiral, the researcher presented the data.

## 1.14 METHODS TO ENSURE TRUSTWORTHINESS

It is suggested that “*Qualitative approaches to achieving rigour include building trustworthiness, authenticity, credibility, transferability, dependability, and conformability*” (Gray, 2014:186). Lincoln and Guba (1985:33) suggest that the following aspects should be addressed to ensure trustworthiness in qualitative studies:

**a. Transferability to illustrate pertinent issues and factors, and thick descriptions to provide evidence for making judgements.**

To ensure transferability in this study, the researcher provided comprehensive descriptions of participant responses in the form of verbatim excerpts to allow readers to make judgments regarding the transferability of the findings.

**b. Dependability, using audit trails through the data.**

To ensure dependability, the researcher retained the audio recordings and transcripts of all the in-depth interviews conducted. In addition, the researcher kept a detailed list of references consulted throughout the study. The researcher further documented in-depth interviews to illustrate how the interviews were conducted. As a result, any other person could conduct interviews with the sampled participants with a high likelihood of reaching equivalent results. The data analysis method was also described in detail.

**c. Conformability, with the audit showing the connections between data and the researcher's interpretations.**

To ensure conformability, the researcher kept a comprehensive account of the research methodology followed to control whether the findings' interpretation, the recommendations and the conclusions can be linked to their sources and if the analysis supports them. The responses gained from the study participants were electronically archived, and the subsequent transcripts were stored for evaluation by other researchers, to authenticate the outcomes of the study.

**d. The research findings were taken back to participants (member checks) to evaluate whether such findings are a tangible manifestation of their views to ensure credibility.**

- e. **Authenticity relates to analysis and interpretation of meanings and experiences that are lived and perceived by research subjects. This approach means that the researcher is aware of the multiple voices within the data and the subtle, sometimes conflicting realities. The following questions could be asked: are the interpretations authentic? Have rival explanations been considered?**

To ensure the authenticity of the analysed data and its interpretation, the researcher kept complete records of how data was analysed and subsequently interpreted. The researcher further considered multiple explanations from participants and not only selected explanations. As a result, an accurate interpretation of the data was made possible.

## **1.15 ETHICAL CONSIDERATIONS**

According to Strydom (2005:97), ethics refer to “...a set of moral principles that offer rules and behavioural expectations about proper conduct towards experimental subjects and respondents.” The researcher adhered to the following ethical obligations, as prescribed by O’Leary (2014:64):

### **a. Informed consent**

O’Leary (2014: 66) emphasises that participants can only give *informed consent* if they have a full understanding of their requested involvement, including time commitment, type of activity, topics covered, as well as all emotional and physical risks potentially involved. O’Leary further clarifies that informed consent implies that participants are:

- i. *Competent* – participants should have reasonable intellectual capacity and psychological maturity to participate.
- ii. *Autonomous* – participants can make self-directed and self-determined choices.
- iii. *Involved voluntarily* – participants should not be unaware, forced, pressured, or duped.
- iv. *Aware of the right to discontinue* – participants should not be under any obligation (or pressure) to continue involvement.
- v. *Not deceived* – the study’s nature, any affiliations or professional standing, and the study’s intended use should be honest and open.
- vi. *Not coerced* – positions of power should not be used to coerce individuals to participate.

- vii. *Not induced* – while it may be acceptable to compensate participants for their time and effort, an inducement should not compromise a potential participant's judgement.

**b. Ensure no harm to participants**

Harm includes emotional, psychological, or physical harm.

**c. Ensure confidentiality and anonymity**

Confidentiality involves protecting the identity of those providing research data, and thus all identifying data must remain solely with the researcher. Anonymity refers to protection against identification, even from the researcher; therefore, information, data and responses collected anonymously should not be identifiable to any participant.

In addition to the above considerations, the researcher followed the principles prescribed in the UNISA Policy on Research Ethics (UNISA, 2007:7).

**1.16 SUMMARY**

In this chapter, the South African and international cable theft phenomenon was outlined. In addition, the research problem, aim, and purpose of the study was identified. The need for further research on the shortcomings experienced in policing of copper theft, and lack of co-operation between the SAPS and all other stakeholders who form part of the NFMCCC, were highlighted. The research's methodological parameters were outlined, with reference to population and sampling, data collection, data analysis, methods applied to ensure trustworthiness, and ethical considerations.

Chapter two presents an overview of copper cable theft in South Africa and internationally.



## CHAPTER TWO

### AN OVERVIEW OF COPPER CABLE THEFT IN SOUTH AFRICA AND INTERNATIONALLY

#### 2.1 INTRODUCTION

Copper theft and the resultant illicit industry created around it are draining the South African economy and negatively impact electricity supply, transport, communication, health services, productivity, and infrastructure. In addition, the theft of copper results in a large-scale lack of service delivery which contributes to consumer frustration and mistrust for local municipalities. According to Pretorius (2012:90), copper theft syndicates are holding the country's economy to ransom. The Chairperson of the Parliamentary Portfolio Committee on Communications stated that copper cable theft is indeed a national crisis. Simultaneously, the Democratic Alliance (DA) Spokesperson on Public Enterprises argues that the time has come to take serious action to stop copper cable theft. The nation expects its government to secure national assets (including copper supported infrastructure), which ensure daily life necessities, for example, essential services like telecommunications, electricity, and transport. In a Parliamentary report, Rhoda (2018:19) opines that the private members' legislative proposal aims to amend various sections of the Protection of the Constitutional Democracy Against Terrorist and Related Activities Act 33 of 2004. Rhoda states further that copper cable's theft, which results in considerable economic losses, should be included in the Act's definitions. Rhoda argues further that the legislative proposal seeks to include punitive measures for those who directly or indirectly benefit from copper cable sale, namely scrap metal dealers.

Rhoda (2018) agrees with Coetzee (2013:1) that non-ferrous metal theft is a concerted effort to attack the South African economy and stunt development and growth. This situation questions whether it would be possible and desirable for non-ferrous metal theft (including copper-cable) to be classified as an act of terrorism. According to Bindeman (2011:3), stricter control measures on export and prosecution for economic sabotage resulting from copper cable theft should be legislated. Bindeman argues further that the SAPS should prioritise copper cable theft as a priority crime. According to Robertson, the Executive Director of CPI, the SAPS will not effectively control copper

cable theft if they do not protect the assets (containing copper cable) that provide essential services. Michael, the DA Spokesperson for Public Enterprises (2012:1), opines that Parliament has indicated that the government is losing the war against copper cable theft.

## **2.2 THE MAGNITUDE OF COPPER CABLE THEFT IN SOUTH AFRICA**

Because of the effect of copper cable theft on the South African economy, electricity supply, transport, telecommunications, health services, productivity, and infrastructure, it must be combatted pro-actively by the SAPS NFMCCC. Araie (2019:1) posits that “...it is time to eliminate this scourge by ruthlessly implementing the law. Dithering is a luxury SA cannot afford as it totters on the brink of a total blackout.” According to Pretorius (2012:24), a literature review on copper theft “...revealed a paradoxical phenomenon in that most of the active initiatives for combating copper theft originated from outside the Gauteng borders.”

According to Liebenberg (2018:1), the magnitude of copper cable theft is a significant challenge globally. South Africa is currently experiencing an unprecedented challenge in terms of the high number of copper cable thefts, specifically in the hot spot areas, e.g., the provinces Western Cape and Gauteng. Morris (2017:1) agrees with Liebenberg (2018:1) and adds that copper mining is not a prime industry in the Cape area and yet it boasts multimillion-rand exports of the precious metal with no accounting for its source.

Morris (2017:1) reports further that corrupt trade by thieves, illicit copper dealers and criminal syndicates who sell to copper-thirsty economies in the East - mainly India and China - is lucrative for the corrupt few but comes at a vast cost to South Africans; from commuters and householders to businesses and public enterprises. A press release by the Kalagadi Manganese Mine (2016:1) states that copper cable theft has a devastating effect on the economy, resulting in indirect costs estimated at R 5 billion a year. According to a report by CPI (2019), Eskom and Transnet's essential services have been seriously disrupted by the scourge, which has catapulted SA into becoming one of the world's leading exporters (albeit illicitly) of copper cable to countries such as China and India.

In the report by CPI (2019) the former SAPS Deputy Provincial Commissioner in Gauteng, Major-General Shadrack Sibiya, affirmed during a special hearing in the National Council of Provinces, that 72 533 incidents of copper cable theft were reported, and 10 736 arrests made in 2013. Transnet's security head retired General Toka, states that from 2008/2009 the parastatal has suffered 6 917 incidents of copper cable theft to the value of R 95,5 million with an estimated replacement cost of R 239 million (excluding the cost of train delays and cancellations (CPI, 2013:1)).

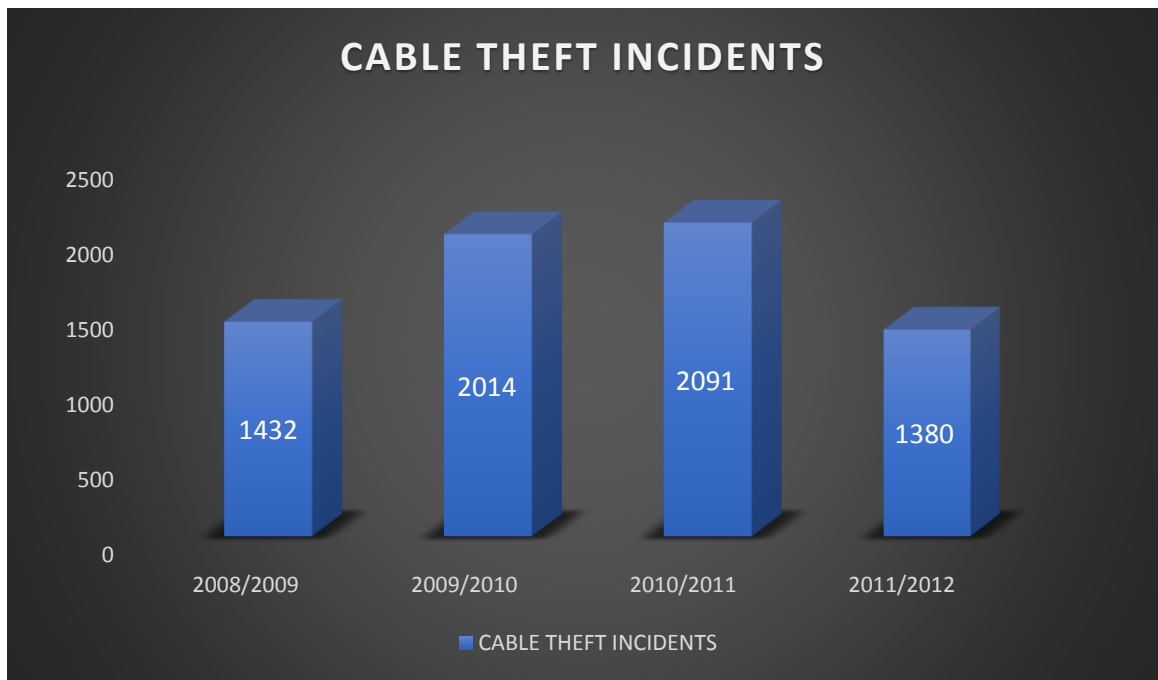
Table 2.1 and Figures 2.1 and 2.2 below illustrate copper cable theft incidents at Transnet from 2008/09 to 2011/12.

**Table 2.1 Transnet copper cable theft analysis from 2008/09 to 2011/12**

<b>FINANCIAL YEAR</b>	<b>CABLE THEFT INCIDENTS</b>	<b>RAND VALUE LOSS</b>	<b>REPLACEMENT VALUE</b>
<b>2008/09</b>	1432	R 12 000 000	R 30 000 000
<b>2009/10</b>	2014	R 27 100 000	R 67 600 000
<b>2010/11</b>	2091	R 38 600 000	R 96 500 000
<b>2011/12</b>	1380	R 17 800 000	R 44 500 000

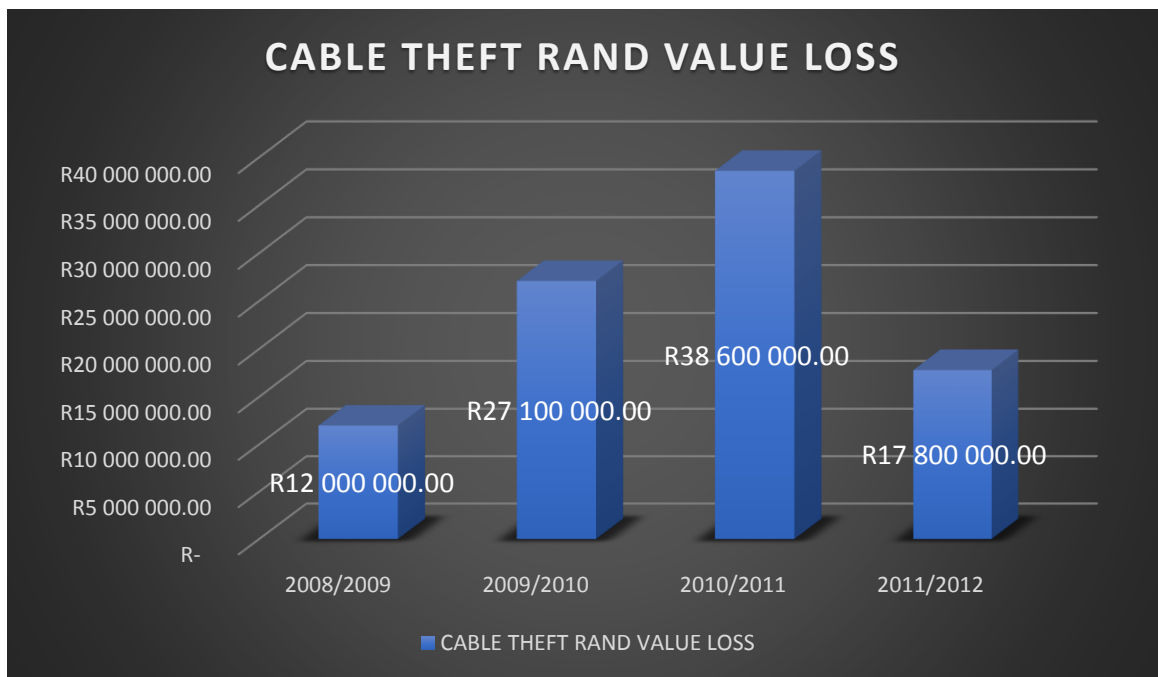
(Transnet Cable Theft Analysis 2008/09 – 2011/12, [s.a.]

**Figure 2.1 Transnet copper cable theft incidents**



(Transnet Cable Theft Analysis 2008/09 – 2011/12, [s.a.])

**Figure 2.2 Transnet copper cable Theft losses comparative statistics from 2008/09 to 2011/12**



(Transnet Cable Theft Analysis 2008/09 – 2011/12, [s.a.])

Eskom Group Executive Distribution, Ms Noah, made a strong proposal for a special crime prevention unit dealing with copper cable theft. Noah posits further that copper cables with an estimated value of R 265 million were stolen in 2010/2011 with an indirect cost to the economy of about R 5 billion. The cost included the cost of replacement and security; the shutdown of business operations; loss of income; loss of exports; power, communication, transport outages; and negative investor perceptions. There was also the human cost of accidents. Noah urges that harsher penalties must be imposed on cable thieves, who are part of organised crime syndicates (Noah, 2012:6).

According to the South African Chamber of Commerce and Industry SACCI (2015:1), the Copper Theft Barometer level increased to R 14.30 million in August 2015 from R 13.2 million in July 2015. The August figure was 9.16 per cent higher than the previous month and 9.5 per cent higher than the previous year. The Copper Theft Volume Indicator increased to 206.70 metric tons in August 2015 from 203.42 metric tons in July 2015. Sokanyile (2018:1) states that Eskom lost R 1.7 million in Cape Town since the beginning of the fiscal year 2018/19. According to Business Tech (2012:1), which quotes Makhanya – the spokesperson for the South African Chambers of Commerce and Industry - copper cable theft increased in January 2012. Makhanya further stated that the Copper Theft Barometer, registered R 21, 9 million in January 2012, up 4,6 per cent from R 20,9 million in December 2011. The increasing copper price is a potential driving force for theft. During February 2012, the price climbed by R 2 776 to R 63 506 per ton. The previous decline in price in 2011 was due to uncertainty in the global economy, which meant that SA's annual copper exports dropped by 4,8 per cent in November 2011.

According to Mawisa reporting for *Carte Blanche* (2019), criminals target copper cables from essential infrastructures like power lines and communication networks. The action borders on sabotage and syndicates make millions of Rand from the activity. The crime of cable theft has become a game-changer, as Mawisa (2019) reports:

*When your cell phone network goes down, it may not be your service provider's fault. When you plunged into darkness and*

*stuck in traffic, because the traffic lights don't work, Eskom might also not be to blame. It's a criminal network stealing everything and anything they can, from power cables to copper, to even batteries that run traffic lights and mobile network towers, stealing from society, and crippling the economy bit by bit.*

Pieterse (2017:1), the Johannesburg City Power Director, states that tunnels coursing under Johannesburg contain copper cables that are being stripped out and smuggled as far away as Asia.

**Table 2.2 National overview of copper cable theft per province (2011)**

<b>PROVINCE</b>	<b>TOTAL OFFENCES</b>
<b>GAUTENG</b>	7 605
<b>WESTERN CAPE</b>	4 344
<b>KWAZULU NATAL</b>	3 719
<b>NORTHWEST</b>	2 366
<b>LIMPOPO</b>	2 348
<b>MPUMALANGA</b>	1 912
<b>EASTERN CAPE</b>	1 429
<b>FREE STATE</b>	1 070
<b>NORTHERN CAPE</b>	443
<b>TOTAL NATIONAL INCIDENTS</b>	<b>25 236</b>

Tables 2.3 to 2.5 illustrate the number of copper theft incidents at the top three police stations in the top five policing clusters in South Africa.

**Table 2.3 Number of copper theft incidents registered at the top three police stations within the top five cluster precincts in Gauteng during 2011**

<b>TSHWANE NORTH</b>	<b>SEDIBENG</b>	<b>WEST RAND</b>	<b>JHB WEST</b>	<b>JHB CENTRAL</b>
<b>Akasia</b>	<b>Vereeniging</b>	<b>Kagiso</b>	<b>Honeydew</b>	<b>Booyens</b>
197	145	147	149	149
<b>Temba</b>	<b>De Deur</b>	<b>Carletonville</b>	<b>Roodepoort</b>	<b>Sophiatown</b>
147	105	85	132	108
<b>Pta North</b>	<b>Evaton</b>	<b>Krugersdorp</b>	<b>Florida</b>	<b>Moffatview</b>
106	78	80	115	106

**Table 2.4 Number of copper theft incidents registered at the top three police stations within the top five Cluster precincts in the Western Cape during 2011**

<b>WINELANDS</b>	<b>WORCESTER</b>	<b>BLUE DOWNS</b>	<b>MITCHELLS PLAIN</b>	<b>NYANGA</b>
<b>Paarl</b>	<b>Worcester</b>	<b>Ravensmead</b>	<b>Athlone</b>	<b>Bishop Lavis</b>
187	148	75	147	89
<b>Stellenbosch</b>	<b>De Doorns</b>	<b>Kuilsrivier</b>	<b>Grassy Park</b>	<b>Nyanga</b>
101	65	67	45	89
<b>Wellington</b>	<b>Wolseley</b>	<b>Delft</b>	<b>Mitchells Plain</b>	<b>Manenberg</b>
101	53	59	45	74

**Table 2.5 Number of copper theft incidents registered at the top three police stations within the top five cluster precincts in Mpumalanga during 2011**

<b>WITBANK</b>	<b>MIDDELBURG</b>	<b>SECUNDA</b>	<b>KWAMHLANGA</b>	<b>PIENAAR</b>
<b>Witbank</b>	<b>Blinkpan</b>	<b>Balfour</b>	<b>Tweefontein</b>	<b>Kwabokweni</b>
172	124	58	54	37
<b>Vosman</b>	<b>Middelburg</b>	<b>Evander</b>	<b>Kwamhlanga</b>	<b>Pienaar</b>
96	112	35	53	31
<b>Delmas</b>	<b>Hendrina</b>	<b>Secunda</b>	<b>Siyabuswa</b>	<b>Nelspruit</b>
67	72	33	32	29

Robertson (2018:3) posits that the effect of infrastructure theft and damage, specifically copper theft, on the South African economy is well known with damages running into billions of Rands annually. Copper theft, however, is a global phenomenon and the recurrent explanation is that metals have become attractive targets due to the soaring price of scrap metal. The price increase is generally attributed to the global demand for metals exceeding the available supply. Consequently, it is proposed that price increases have stimulated the creation of illegal markets that provide opportunities to sell stolen metals at financially rewarding prices.

Life preserving assets that supply electricity, telecommunications, transport, and revenue are under threat, and citizens expect the government to secure the national assets which facilitate daily life. Due to a dearth of academic literature, and the inherent economic nature of this phenomenon, it has become evident that a sophisticated, yet integrated approach is necessary to mitigate a multi-faceted crime threat within a wide-ranging and high-impact target. Moreover, it is apparent that stakeholders know precisely “...how they are being plundered, but they appear to be unable to counter the threat within their current security configurations and resources” (Pretorius, 2012:3).



## **2.3 THE IMPACT OF COPPER CABLE THEFT IN SOUTH AFRICA**

According to Amisi (2015:109), South Africa has a “...*well-developed infrastructure consisting of a large rail, road, telephone, and electricity distribution network.*” The infrastructure was built up over decades when \$ 8 000 per metric ton of copper was inconceivable. Liebenberg (2018:1) states that copper cable theft is a significant challenge for South Africa, which has a direct negative impact on the economy. Liebenberg (2018:1) further argues that the impact of copper cable theft on the essential infrastructure is draining the fiscus, disabling infrastructure and significantly contributed to South African being downgraded to junk status.

Van Dalen (2012:4) posits that in 2010 copper cabling with an estimated R 265 million value was stolen, resulting in an indirect cost to the economy estimated at R 5 billion per year. Copper cable theft has resulted in the following:

- negative investor perception of South Africa,
- power, communication, and transport outages resulting in low productivity,
- damage to business and other infrastructure during or after the theft,
- huge replacement cost of stolen copper cables; and
- the cost of security to protect cable infrastructure.

According to Van Dalen (2012:4), harsher penalties for cable theft offenders must be implemented, to deter would-be offenders from the perceived easy benefit resulting from the crime. Moreover, the entire crime value chain must be dismantled, including the export (illegally) of metals, to countries such as Korea, China, India, and the United Arab Emirates. However, Van Dalen (2012:4) predicts that copper cable theft is not likely to end if non-ferrous cable metals prices remain sufficiently attractive to prospective thieves.

### **2.3.1 Economic impact**

The former Minister of the Department of Public Enterprises, Malusi Gigaba, confirmed that Eskom and Transnet continue to suffer the loss of millions of Rand because of copper cable theft (Drodskie, 2018). The SACCI spokesperson, Drodskie (2018) opines that *...the effects of copper theft on the South African economy are vast, ranging from delays in rail transport and shipping to dysfunctional traffic lights.*”

According to Van den Berg (2007:1) victims of copper cable theft not only suffer direct consequences because of financial losses such as replacement cost but that individuals and organisations suffer indirect losses, such as:

- Reputational damage to an organisation.
- Negative impact on service delivery.
- Lowered employee morale.
- Loss of revenue or income.
- Labour costs to replace and repair.
- Overtime costs for staff.
- Cost of equipment and vehicles.
- Security costs to protect and safeguard assets and customers.
- The cost of electronic equipment, alarms, and monitoring devices.

According to Planting (2011:1), copper theft costs the South African economy an estimated R 10 billion per year. Planting (2011:2), opines further that “...with the national growth limping along at 3 per cent and national debt set at billions, this problem clearly cannot remain unresolved as it can destroy the country’s fragile economy.” According to SACCI (2014:1) losses due to copper theft increased marginally to R 13.2 million in October 2014, up from R 13 million in September 2014. This was the fifth monthly increase in 2014 and was 43 per cent higher than in 2013. The increase in October 2014 was a worrying signal that copper theft may increase over the short to medium-term. The volume of stolen copper increased from 173 tons in September 2014 to 176 tons in October 2014. The increases in copper theft suggest an upward trend which appears to have taken hold. SACCI reported that copper theft's impact ranges from frustration over network service interruption to the loss of lives. Municipalities are also placed under the financial strain of replacing stolen cables.

In its annual report, Telkom said that its losses due to cable theft increased from R 165.4 million to R 183.5 million between their 2010 and 2011 fiscal year, and the number of cable theft incidents increased by 17 per cent. Cable theft has also been blamed for several deaths (due to electric shock and burns) of electrical engineers repairing and maintaining vandalized substations and copper cables (Peters, 2014).

From a financial perspective, Eskom and Transnet have collectively lost R 1.2 billion through copper cable theft between the years 2006-2012 (Business Tech, 2012).

### **2.3.2 Impact on transportation**

According to a press release by the Congress of South African Trade Unions (COSATU) authored by Parks (2015), it is estimated that copper cable theft costs South Africa up to R 7 billion per annum much of which impacts on hard-working taxpayers. In addition, copper cable theft threatens lives. For example, two people died, 19 were critically injured, and a further 281 were injured when two trains collided near Pretoria in January 2011. This collision resulted from the theft of two 25-metre copper cables, which disrupted the signalling system. This accident's financial cost to train and rail infrastructure was more than R 22 million (Parks, 2015:2).

Parks (2015) further states that the “...escalation of copper cable theft and vandalism in South Africa’s major cities, the deleterious effects on the social fabric and financial base of the electricity generation and distribution utilities, as well as a lack of adequate, public interventions for addressing these challenges are all widely documented in the literature.” On the socio-economic front, cable theft and vandalism have interrupted the Gautrain (Johannesburg’s electric-powered inter-city railway transport system) schedule resulting in incessant delays due to signalling problems, disruption of telephone networks and numerous accidents at faulty robots leading to traffic jams (Pretorius, 2012:22). In contrast to these phenomenal losses, the Metal Recycling Association of South Africa (MRA) estimates the value of the scrap metal industry - which benefits directly/inadvertently from cable theft - to be at a staggering R 15 to R 20 billion a year (Pretorius, 2012: 28).

Transnet (2012:2) states that the company lost R 4,5 million to copper theft in the 2016/2017 fiscal year in KwaZulu Natal. In 2017 they lost R 2,1 million. Further, such theft gives South African companies a bad reputation as clients do not receive their goods on time, forcing them to consider other alternatives. Transnet (2012:2) argues that it has invested in physical, technological, and specialised security to combat this crime, resulting in a reduced profit margin. PRASA (2019:22) likewise reports that it experiences high levels of lawlessness and the resultant copper cable theft cost the company R 625 million during 2018/2019.

### **2.3.3 Impact on telecommunications**

According to Parks (2015:1), Telkom reported R 183.5 million losses due to copper cable theft in the 2010/2011 budget year. Parks (2015:1) further posits that “...in certain areas, Telkom has stopped replacing stolen cables due to the high theft rate.” Parks (2015:2) states further that, “...between 2006 and 2011, Eskom, Telkom and Transnet reported combined losses of more than R 3.12 billion due to copper cable theft. Workers’ jobs are threatened, as companies drain their funds to repair damages caused by copper cable and metal theft. Workers and companies suffer further financial losses due to constant train delays caused by copper cable theft.” According to Gilbert (2016:1), copper cable theft cost Telkom over R 200 million during the 2015 budget year. The company further revealed that it spent R 100 million on cable theft repair costs and another R 107 million on security services. Telkom also stated that it experienced over 6 000 incidents of cable theft across its copper network over the last year.

### **2.3.4 Impact on the agricultural sector**

Pieterse (2017:1) reports that copper cable theft is on the rise in the Midlands, affecting farmers, businesses, and the economy. Pieterse (2017:1) quotes La Marque, the Director of the KwaZulu-Natal Agricultural Union, who posits that copper thieves dig up agricultural pivot lines that feed irrigation systems and Telkom and Eskom lines. The cost of doing business is affected, and this includes time and delivery delays. The impact is severe as it leaves farms unable to function efficiently. Pieterse (2017:3) further states that it is essential that all incidents of cable theft to be reported and stricter measures of prevention to be implemented. Once the copper has been stolen, it is sold to scrap metal dealers. Scrap yards are, by law, supposed to keep copper for seven-days along with the seller’s identity number and contact details. This regulation has resulted in some scrap dealers moving their copper haul to other sites until the seven days expire and police have already inspected their primary site. The copper is then exported to India and China (Pieterse, 2017:3).

### **2.3.5 Impact on electricity supply**

According to Parks (2015:3), South African household electricity consumers have been incensed by escalating power tariffs in recent years. Meanwhile, Eskom, the main power generating company, justifies rising tariffs based a need for sufficient funds to

modernise its ageing infrastructure. Any additional reason for Eskom to further raise tariffs is therefore considered unwelcome by consumers. Peters (2014:4) opines that cable theft is also to blame for several deaths due to electric shock and burns arising from electrical engineers repairing and maintaining vandalized substations and copper cables (Peters, 2014). From a financial perspective, Eskom and Transnet have collectively lost R 1.2 billion through copper cable theft between the years 2006-2012 (Michael, 2012). These numbers correspond to those released by Telkom, which indicate that the entity lost R 1.9 billion in repair and replacement costs due to copper cable theft between 2006 and 2011 (Michael, 2012).

Noah (2012:3) the Group Executive for Distribution Division at Eskom, made the following statement concerning the effect of copper cable theft on the power utility:

- i. The theft of non-ferrous metals in South Africa has become a severe problem in the past few years, impacting negatively on the economy.
- ii. This can be attributed to the dramatic increase in the copper and aluminium prices because of the growth in international demand for the materials, amongst other factors.
- iii. The sectors most affected by non-ferrous metals' theft are communication, rail transport, Eskom, and other utilities.
- iv. Eskom Distribution Division is most affected by non-ferrous metals' theft because of the vast geographical range of its network, the electricity network capacity/load and infrastructure that runs mostly in remote areas in South Africa.
- v. A total number of 1 591 conductor theft incidents were reported between April and December 2011 (cable 1 399, overhead conductor 118 and earth straps from substations 74 incidents). Total losses (direct costs) suffered are estimated at R 22 022 855. A total of 292 perpetrators were arrested. Material to the value of R 2 477 033 was recovered.

Wilson (2018:1) reports that nationally, the government estimates cable theft costs between R 5 and R 7.5 billion per year (mostly affecting Eskom). The Nelson Mandela Municipality described cable theft as a massive problem that causes havoc to the electricity supply. An estimated R 10 million has been spent on replacing underground and overhead electricity cables. This includes the replacement and purchasing of the wires to re-install and fix structures damaged by cable theft. Mamaila (2019:1) states

that ongoing copper cable theft from companies, such as Eskom, has a devastating effect on the local copper industry.

### **2.3.6 Impact on critical infrastructure**

Bornman (2018:1) reports that Eskom recovered more than R 5 million worth of stolen infrastructure, including copper cables, at a site in Muldersdrift, west of Johannesburg. The power utility's Divisional Executive of Security, General Tebogo Rakau stated that one person had been arrested for dealing and being in possession of stolen property (Bornman, 20018:1). This indicates the presence of an organised crime syndicate. Bornman (2018:3) argues that Eskom and the SAPS should intensify their fight against infrastructure theft, which not only plagues the power utility but other state-owned entities such as Transnet and PRASA. Smith (2013:18) states that over and above the financial implications, broader social implications affect essential services, clinics, hospitals and ambulance services, police services, fire brigades, schools, government departments and municipal services, the SANDF, and the South African Postal Service (SAPO). If any one of these services is non-operational, it has a severe impact on consumers and can lead to a loss of life in medical infrastructure insufficiencies.

Bornman (2018:1), opines that while it may appear that the only victims of cable theft are organisations like Eskom and municipalities who bear the cost of replacing stolen cable and damaged infrastructure, the effects suffered by society can be even worse and include prolonged power outages which affect businesses, and ultimately lead to job losses. Unplanned power outages resulting from cable theft also affect healthcare services at clinics and endanger the lives of people who are on life support equipment. Copper cable theft costs the economy between R 5 billion and R 7 billion a year, while Eskom spends in the region of R 2 billion a year replacing stolen copper cables (Bornman 2018:1).

Mawisa (2019) states that there is no single piece of infrastructure or place immune to copper cable theft. Criminals target essential infrastructure costing the country more than R 5 billion every year, not including consequential losses. In addition, the cost to human life is high. Twenty-two miners, for example, were presumed dead at Gloria Coal Mine after cable thieves caused a gas explosion in 2019 (Ramphela: 2019:1). When it comes to essential infrastructure-related crime, it is not merely a case of theft

or damage to property. The crime lends itself to sabotage, and authorities are adamant that the culprits' punishment must meet the crime.

Johnson, interviewed as part of the television series *Carte Blanche* (2019), stated that the Criminal Matters Amendment Act has become the ultimate game changer and made it possible to close the gaps created by past legislation. Since 2016, if successfully prosecuted, criminals found guilty of tampering, damaging, or stealing essential infrastructure can receive terms of imprisonment of up to 30 years, a fine up to the amount of R 100 million, or both.

In the *State vs Malome Alfred Matsitela and others*, the court stated that theft is a severe crime in itself, even if committed in isolated circumstances by individual persons. However, when the crime is committed by gangs or syndicates or two or more people in a planned and organised manner, the seriousness of the crime reaches a different level, which is further worsened when the theft is from the country's essential infrastructure relevant to the delivery of basic services to the community. The legislature made it clear in the Preamble of the Criminal Matters Amendment Act 18 of 2015 that increased sentences are called for because of “...*the unacceptably high incidents of crime relating to essential infrastructure*”, and since “...*essential infrastructure-related offences are becoming increasingly more organised...*” and “...*offences which of themselves are relatively minor [cause] considerable damage to essential infrastructure.*” Copper cable theft and the damage to infrastructure, for example, cost Telkom, and many other companies, millions each year in repairs, lost working hours and lost customers.

Dordley (2019:1), the Western Cape Regional Head of PRASA posits that the combined efforts of the PRASA Protection Services, SAPS Rapid Rail Response Unit, provincial SAPS offices and security contractors have yielded excellent results. Dordley (2019:2) further reports:

- i. PRASA is one of several industries reliant on copper technology affected by theft (others include mobile phone operators, Eskom, municipalities, and Transnet).
- ii. Annual losses amount to R 5 billion (excluding the cost to the economy).

- iii. The illicit metal theft trade causes considerable damage to infrastructure and has a debilitating effect on society.

## **2.4 AN OVERVIEW OF COPPER CABLE THEFT INTERNATIONALLY**

According to Bell (2018), the world's ten biggest copper producers are:

- i. *Corporación Nacional del Cobre de Chile (Codelco)*
- ii. Freeport McMoRan
- iii. BHP Billiton
- iv. Clencore
- v. Southern Copper Corp.
- vi. KGHM Polska Miedz
- vii. Antofagasta
- viii. First Quantum Ltd
- ix. Rio Tinto Group
- x. Vale

According to Bell (2018), these producers accounted for over 9.83 million metric tons - or 108 million US tons (known as short tons) - of the precious metal in 2017. The top four companies accounted for more than 62 per cent of that total. With copper going for \$ 3.10 per pound as of fall 2017, the top ten firms produced over \$ 640 billion worth of the metal in that year. Controlling about 19 per cent of the world's copper reserves, Codelco is an independent company owned by the Chilean Government. Codelco produced approximately 1 842 million metric tons of refined copper in 2017 - roughly 11 per cent of the world's total - worth \$ 125 billion, according to 2017 prices (Bell, 2018).

Phoenix-based Freeport-McMoRan Copper & Gold Inc. is the world's largest publicly traded copper producer. The company's assets include the Grasberg Mining Complex in Indonesia, the world's largest copper and gold mine in recoverable reserves; the Morenci and Safford minerals districts in North America; and the *Tenke Fungurume* minerals district in the Democratic Republic of Congo. Their ownership stake was sold to a Chinese company (China Molybdenum) for \$ 2.65 billion in early 2017. FCX produced 1.7 million metric tons of refined copper in 2016 (about 9 per cent of the world's total), making it the world's second-largest copper supplier. Freeport-McMoRan posted revenues of \$ 15.86 billion in 2017 (Bell, 2018).



### **2.4.1 United States of America**

According to a report by the FBI Criminal Intelligence Section (2008:1), copper thieves threaten US critical infrastructure by targeting electrical substations, cellular towers, telephone landlines, railroads, water wells, construction sites, and vacant homes. The theft of copper cable from these targets disrupts the flow of electricity, telecommunications, transportation, water supply, heating, security, and emergency services and presents a risk to both public safety and national security. Copper cable thieves are typically individuals or organised groups who operate independently or in loose association with each other and commit thefts in conjunction with fencing activities and contraband sale. Organised groups of drug addicts, gang members, and metal thieves conduct large scale thefts from electric utilities, warehouses, vacant properties, and oil-well sites for tens of thousands of dollars in illicit proceeds per month.

The FBI Criminal Intelligence Section (2008:1) further stipulates that the demand for copper by developing nations such as China and India created a robust international copper trade. Copper cable thieves exploit this demand (and the resulting price surge) by stealing and selling the metal for high profits to recyclers across the USA. As the global supply of copper cable continues to tighten, the illicit copper cable market will increase. The FBI Report (2008) states that China, India, and other developing nations drive the demand for raw materials such as copper and are creating a robust international trade. Copper thieves receive cash from recyclers who often fill orders for commercial scrap dealers. Recycled copper flows from these dealers to smelters, mills, foundries, ingot makers, powder plants, and other industries to be re-used in the USA or supply the demand for raw material at the international level.

According to FBI Criminal Intelligence Section (2008:1), on 4 April 2008, five tornado warning sirens in the Jackson, Mississippi, failed to warn residents of an approaching tornado because copper thieves had stripped the sirens of copper wiring, thus rendering them inoperable. In addition, on 20 March 2008, 4 000 residents in Polk County, Florida, were left without power after the copper wire was stripped from an active transformer at a Tampa Electric Company (TECO) power facility. Monetary losses to TECO amounted to approximately \$ 500 000. Moreover, in March 2007,

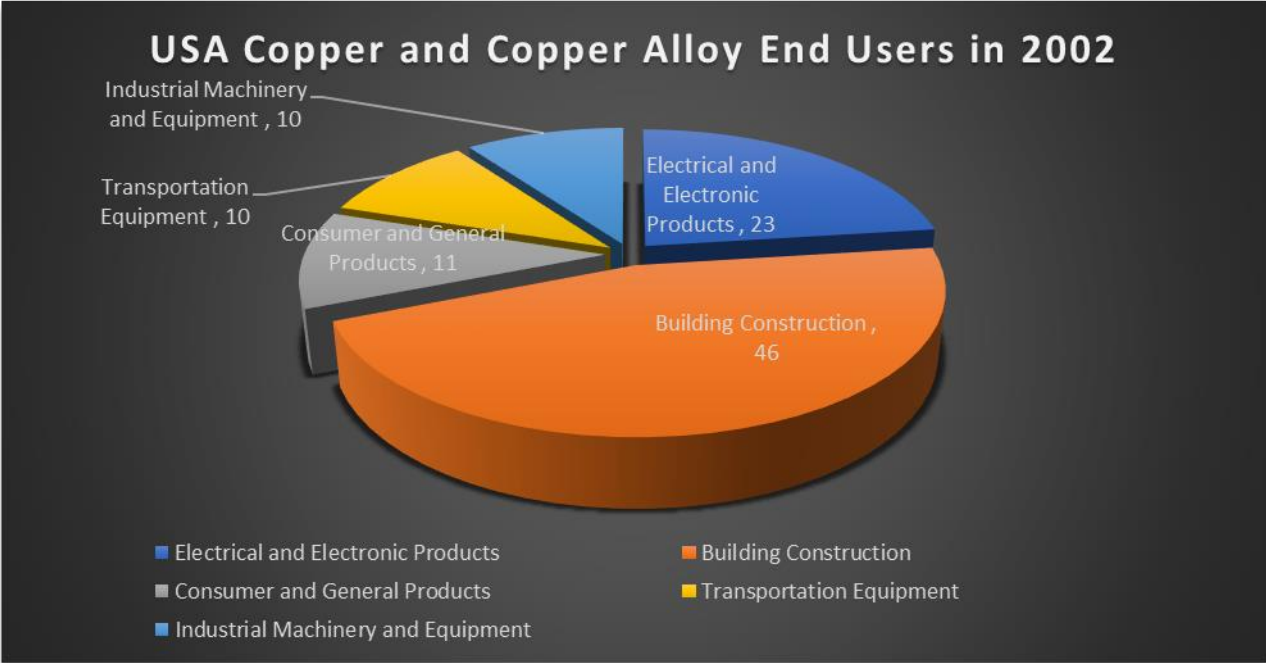
farmers in Pinal County, Arizona, experienced a copper theft epidemic as perpetrators stripped copper from water irrigation wells and pumps, resulting in the loss of crops and high replacement costs. Pinal County's loss amounted to \$ 10 million. Schoenfelder, (2009:7) states that copper cable theft costs the public \$ 1 billion per year. The Arizona Department of Transportation estimates that costs over the last two years have exceeded \$ 500 000. The theft appears to be increasing, and the culprits are becoming bolder and more sophisticated.

The severe increase in the cost of copper cable, coupled with the multiple options for its sale, has made the crime attractive to thieves. Copper cable theft is not confined to any specific area, as cables have been stolen during shipping, while in storage, and after installation. Vacant buildings and street lighting remain common targets of cable theft. Legislation in many States has changed because of the magnitude of this phenomenon (Schoenfelder, 2009).

According to Kolevar (2007:1), the theft of copper wire from utilities occurs primarily at substation transformers, from utility poles, or the back of service trucks. The thefts have several adverse consequences, including the apparent economic impact, service disruptions, personal injury to or death of persons involved in the theft or later recovery efforts. Utilities across the USA are paying increasing attention to this growing problem and have begun to investigate and implement measures for deterring thefts, protecting facilities, and recovering from the consequences. Naturally, these efforts come at a cost which affects the taxpayer.

Kolevar (2007:1) states further that copper cable theft is on the rise globally. While Kolevar focuses on electric utilities in the USA, copper is increasingly being stolen from other sources such as construction sites, telecommunications towers, and even individual homes. Lumber, copper pipe and wiring, and other materials left unsecured at building sites are all attractive targets and construction sites have been plagued by theft for years. A large concentration of copper in one place creates a lucrative target for theft. Numerous factors contribute to an increase in copper cable theft. Worldwide demand for copper has significantly increased over the last few years, for example. Figure 2.3 below demonstrates the percentage proportion of end-users of copper and copper alloy in the USA during 2002.

**Figure 2.3: USA Copper and Copper Alloy End Users in 2002**



Source: Copper Development Association, Inc. (2002)

According to Bergal (2018:1), during September 2008, a pickup truck struck and killed a 55-year-old woman crossing an intersection in a motorised wheelchair on a dark stretch of Kansas City highway. Bergal (2018:1) explains that streetlights were non-functional due to copper cable theft. Besides creating dangerous conditions, copper wire thefts have become a drain on US resources. Thieves have stripped copper wire from abandoned houses, commercial buildings, and construction sites for years. They further tend to target public right of ways, creating a nuisance for public safety and transportation officials.

Bergal (2018:1) explains that copper wiring is typically found in boxes at the base of light poles or on highway barriers, and in control stations (above-ground cabinets off the roadway connected to a whole section of lights). Thieves dressed in phoney gear (such as reflective vests) posing as utility or transportation workers have been known to target these sites. Others brazenly break into the boxes and steal the wires outright. The perpetrators, some of whom police confirm are drug addicts looking for quick cash, take their loot to scrap recycling yards to sell. Stealing copper can be lucrative. In 2018 scrap copper sold for more than \$ 2 a pound.

Koba (2013:1) quotes Adelizzi, the Executive Vice President of the American Supply Association who states that various industries use copper for various reasons. It is attractive to thieves because it is easy to steal; difficult to get caught stealing and the penalties for getting caught are merely a reprimand. The latter is a problem everywhere. Copper theft is an epidemic across the USA spurred by copper's record high values in recent years and a vast pool of vacant properties that have become easy targets for such crime.

Hunt (2014:2) quoting Headley, the Vice President for Cassidy Turley in Indianapolis, states that because copper is often found in heating, ventilation and air-conditioning systems, plumbing, electrical wiring, and fibre-optics; it is highly valued at scrap yards, enticing thieves to steal the material and sell it for quick cash. However, the cost to real estate portfolios is not just the stolen copper itself, but the extensive property damage resulting from theft. Property managers should be concerned because the crime often requires restoration work which increases costs. According to statistics in a May 2013 report from the National Insurance Crime Bureau, which tracks metal theft statistics; between January 1, 2010, through December 31, 2012, the number of insurance claims for the theft of copper, bronze, brass, or aluminium increased thirty-six per cent when compared with the same time between 2009 and 2011, and ninety-six per cent of those claims were for copper alone. Copper theft and losses to the US businesses sector cost nearly \$ 1 billion annually. Hunt (2014:2) quotes Kleinman the head for the Zurich Insurance Group, on the fact that copper theft is not a cheap problem to fix. He states further that the real cost to society includes building repairs and the replacement of mechanical or electrical systems that have been stripped of copper.

McNees (2017:1) opines a total of 27 514 claims for the theft of copper, aluminium, brass, and bronze submitted to Insurance Services Office (ISO) Claim Search between January 1, 2014, and March 31, 2018. Of the 27 514 total claims, the vast majority (98%) pertained to copper theft. Of these claims, 64 per cent were on personal policies, while 36 per cent were against commercial policies. When the number of metal theft claims and copper prices were compared, a positive correlation (0.55) was observed between the values; however, this correlation was less significant than identified in the prior Metal Theft ForeCAST report (0.91). The average copper prices appeared to

climb in 2017 while the number of metal theft claims submitted to the ISO Claim Search continued to decrease in 2017.

In 2008 an FBI Criminal Intelligence Report (FBI, 2008) scoped out the problem and drove innovative solutions. Among the findings:

- i. The demand for copper from developing nations such as China and India create a robust international copper trade, and as the global supply of copper continues to tighten, the market for illicit copper will likely increase. From 2001 until 2008, the price of the metal has increased by more than 500 per cent.
- ii. The thieves, many of whom are drug addicts or gang members, may act individually or as part of organised groups and are interested in quick cash from selling copper to scrap metal dealers.
- iii. Targets include electrical substations, railroads, security and emergency services, and other sensitive sites. Copper theft has been responsible for shutting down railway systems and even 9/11 emergency systems.

According to the FBI (2008), on the surface, “...*it could be a relatively small theft...but the public safety impact could be significant.*” Moreover, while copper thieves may not intend to compromise critical infrastructure, they can still be charged with more serious federal crimes. Most copper theft involves a relatively small amount of money, often takes place in rural areas, and is investigated by local law enforcement agencies which help explain why, until recently, the implications of these crimes fell below the radar of federal law enforcement. The FBI intelligence analyst who wrote the FBI Report (FBI, 2008:3) spoke with 150 people from local and state law enforcement and officials from railroad and energy companies regarding their copper cable theft experiences, whom all indicated that the crime is often miss-classed as a minor offence.

Solutions to copper theft are, however, being developed in the US. Several informal task teams between local, state, and federal law enforcement agencies have been established to combat copper theft, most notably in Nevada. In one such case, a copper thief was charged with a more serious federal crime carrying a potential 20-year sentence. The FBI has acknowledged that there is still much work to be done, but

serious issues surrounding copper theft are acknowledged and addressed at high levels (FBI, 2008).

#### **2.4.2 United Kingdom**

According to Rogers (2012:1), copper cable theft is a widely reported modern plague. In a world thirsty for metals those contained in power cables fetch a high premium. In a recessionary Britain, the number of people prepared to take the risk to steal copper cable is increasing. That is why copper thefts increased by 50 per cent during 2011/2012 alone. Prices in the United Kingdom have doubled since 2009. In the researcher's experience, copper cable theft is illegally conducted, and the proceeds are pro-actively sold to the waiting customer who is usually a legitimate dealer without the buyers (syndicates) ever handling the copper. It is directly sold from the environment where it is stolen to the new awaiting buyer by using a method to photoshoot the copper and then take a minimal risk by selling it.

Rogers (2012:1) states that commuters heading into London in the mornings face a frustrating journey. During February 2012, a mere 30 ft of cabling was stolen overnight from beside the track outside London Bridge, yet the disruption was staggering. Over 1 650 trains were delayed at a cost to Network Rail of £ 640 000 and the fury of thousands of paying passengers. Many cables are ripped up in the dead of night from the side of railway lines in the UK.

Rogers (2012:1) states further that according to Chris Hearn, the Head of British Transport Police, the police are aware of what the public might think of them, but the energy suppliers and the railway companies suffer because of this crime. There are also tens of thousands of copper cable theft victims when power to homes and hospitals is lost. In some cases, houses have caught fire and trains are severely delayed. The crime causes massive disruptions and is highly dangerous. This has an enormous effect on the economy of Great Britain.

Roger (2012:1) believes that copper cables are easy to target because they are found far from homes and people, and there are thousands of miles of rail-track to choose from, making it impossible to protect. Rogers (2012:2) went undercover with copper thieves and reports that men using assumed names use the black-market economy to

shift their loot. Rogers (2012) passed this information to both the Warwickshire Constabulary and the British Transport Police. An intelligence unit within the British Transport Police confirmed that an investigation based on the account followed.

According to Sidebottom (2012:2), significant increases in the copper price are attributed to a global supply and demand imbalance, which is recognised as the main contributor to the surge in copper theft. This is supported by research analysing the relationship between copper price and copper cable theft from the British Railway Network. It is argued that price increases have generated more significant opportunities for offenders to sell stolen copper cable at financially rewarding prices with minimal risk of detection.

### **2.4.3 China**

During a televised news report RGTE Staff (2015) reported on stacked 40-foot containers taken to a location in Foshan, China, a district west of Guangzhou that is home to many scrap yards and secondary metals production plants. An operation where red metal (copper and brass) scrap was hand-picked and removed from shredded mixed metal scrap loads was described. The segment explained how dirt was shovelled into containers after the copper scrap was removed to maintain its recorded weight.

RGTE Staff (2015) states that fake replacement container seals replace genuine seals when containers are entered illegally. The culling of copper-bearing scrap from mixed loads proves profitable for the thieves but results in widely varying copper percentages for the containers' recipients compared with the shipper's records. Scrap recyclers have long complained of theft from containers in south China and Hong Kong, and the crime rings in that region became the focus of attention at a Bureau of International Recycling (BIR) session in 2012.

According to RTGE Staff (2015:1), bearish market conditions continue in copper scrap markets, with Chinese demand and output affecting both sectors. RTGE Staff (2015:1) quoting Melvin Lipsitz, president of M. Lipsitz & Co., based in Waco, Texas, says China's current economic difficulties seem to be weighing heavily on the copper sector. Lipsitz describes the situation in China as a significant economic and banking issue

*“...that will take a great deal of time to work its way out.”* In addition, he says the strength of the US dollar is influencing China’s interest in US scrap.

Meanwhile, statistics continue to portray China’s slumping demand for imported copper scrap. An article by Andy Home of Reuters (Home, 2015:2) says imports of primary copper concentrates are booming in China, while the country’s copper scrap imports fell from 4.9 million metric tons in 2012 to 3.9 million metric tons in 2014. In the first five months of 2015, Home demonstrates, copper scrap imports were down 8 per cent compared with the first five months of 2014. Furthermore, a July 2015 Bloomberg Business Report (Bloomberg, 2015) indicates that growth in copper mining capacity around the world will increase for the next few years. RTGE Staff (2015:2) states further that if the 2015 price of copper is taken to indicate the scrap markets' health, it portrays a gloomy picture. The LME copper price fell to \$ 5 240 per metric ton in July 2015, the lowest in six years.

#### **2.4.4 Australia**

Australia is also targeted for copper theft, and her black market expands daily. This harms the community which influences the economy of the country. According to a report by the Crime and Misconduct Commission Queensland (CMC 2012:10) copper is stolen from locations such as power stations, railway lines, telecommunications facilities, churches, construction sites and unoccupied buildings.

Most copper cable thefts in Queensland are opportunistic and unsophisticated. There have nevertheless been some instances of larger-scale, organised copper thefts. In 2010, for example, one group of offenders stole three tons of copper cabling from 11 substations in South-East Queensland (CMC 2012:10). The offenders were believed to have committed the thefts to fund their drug use and, although they were not organised criminals in the traditional sense, their offences nevertheless showed considerable co-operation and planning. Queensland Police Service officers indicated that the nature of offences in Queensland suggest that organised groups of offenders with specialist knowledge and skills are involved in most copper cable thefts. For example, recent cases have involved copper cable being removed from underground; a feat almost certainly requiring an electrician and multiple offenders with technical skills to remove and transport the materials (CMC Queensland, 2012:10).



According to the CMC Queensland (2012:10), despite the indication of a few organised copper thefts, the CMC has not received reports of cases involving *traditional* organised crime groups. The offenders in the example described above, for instance, were low-level drug users, who committed their offences to fund their drug use. Organised copper cable theft in Queensland in 2012 seems to be the domain of a loose network of offenders with familial or social connections. There are no indications of a large or increasing problem with organised copper cable theft in Queensland. However, the issue should be monitored over the next few years, for two key reasons.

- i. Copper theft, in general, is a large and growing problem overseas. In the USA, for instance, metal theft insurance claims increased from less than 14 000 between 2006–2008 to over 25 000 in 2009–2011 (Speer, 2012). Similarly, copper thefts from UK railways rose by 70 per cent over 12 months, on top of a 65 per cent increase the year before (Herrmann, 2012; McCorkell, 2011). These trends are believed to have been driven by dramatic increases in copper prices fuelled by the high demand for copper to support rapid industrialisation in China (Tan, 2017). Some experts predict that the global demand for copper (and thus prices) will continue to increase. The same factors apply to Queensland and may result in similar increases in copper cable theft. With this comes the potential for organised offenders to increase their involvement in copper cable thefts to make considerable profits. Indeed, organised crime networks have been implicated in the UK (Adam, 2011; Gladdis, 2011), and have been identified previously in Australia when copper prices reached record highs. In early 2008, authorities uncovered a Victorian network trying to ship \$ 2.7 million worth of stolen copper wiring to the Asian black market (CMC, 2012:9).
- ii. Copper theft can have significant and wide-reaching effects. These include:
  - severe risks to health and safety, including the risk of electrocution for offenders, utility workers and members of the public, as well as explosions and flooding (CMC, 2012:9),
  - disruption to daily living, including the loss of water and electricity supplies, and interruptions to transport and telecommunications services (CMC, 2012:10),
  - increases in the cost of living. The costs of repairing the damage caused by copper cable thieves often far exceed the value of stolen copper – in the

Queensland case described above, the offenders caused around \$ 750 000 worth of damage. These costs are then passed on to consumers through increased building costs, utility costs, transport costs and insurance premiums (CMC, 2012:9).

The extent of these adverse effects in Queensland would be amplified by any future increase in organised copper theft. This highlights the importance of monitoring the situation and intervening early if any increasing trend starts to emerge. Given that organised copper cable theft is not currently a significant problem in Queensland, it is difficult to determine the critical contributors. However, the following factors are likely to be influential (Tan, 2017):

- Many locations where copper is kept are perceived as ‘soft targets’ – that is, they are thought to be isolated, insecure or easily accessible. For example, electrical substations are often found away from residential areas, and construction sites are easily accessible before the lock-up stage. For organised offences, insider involvement (for example, through employees of construction, utility, or transport companies) might also facilitate access to copper.
- People are willing to buy stolen copper. These include disreputable, non-compliant and unregistered metal recyclers, who do not notify police upon receiving goods believed to be stolen. This is less likely in large-scale operations, which might instead attempt to capitalise on overseas black markets that allow more copper to be sold at higher prices.

According to the CMC (2012:13), organised copper cable theft could increase over the next two to three years, in Queensland if the demand for copper (especially in Asia) continues to grow, and if organised crime groups see this as a reasonable opportunity for making money. Slessor (2018:2) quotes Alan Morgan, the Managing Director of Recycling Australia who states that copper remains one of the highest value scrap metals in Australia and that there are still plenty of illegal scrap metal companies who will take illegal copper cable and other scrap metals for cash. Depending on the quality and type of copper cable, it is probably the highest value scrap at the moment. Thieves can go to any scrap metal company, and while the legitimate scrap metal companies will still take registration numbers, driver’s license and all the seller details, the illegal scrap companies will take the cabling with no questions asked.

Slessor (2018:3) states that work sites are often the target of theft of tools and materials like scrap metals, and he believes it is a common theft Australia-wide. There have been some changes in the industry where New South Wales is now cashless, Victoria is heading that way, and it is recommended that other States follow suit. This means that law enforcement can trace income resulting from the theft of copper cable. Copper cable is an easy target for theft, and illegitimate companies fuel the problem by offering quick cash. During May 2018, the commodity prices across the board were high. The price for steel was around \$ 2000 per ton compared to between \$ 7-8000 per ton for copper. The theft of copper cable is undoubtedly an opportunistic crime made easier because copper does not contain serial numbers or other identifiable features and is virtually untraceable (Slessor, 2018:3).

#### **2.4.5 Canada**

According to the Canadian Electricity Association (CEA), stealing copper cable from electricity infrastructure is extremely dangerous (CEA, 2015:12). It not only puts the lives of the thieves in danger, but emergency first responders, utility workers, and residents as well. The theft of copper cable from electricity infrastructure can cause fires, explosions, severe or fatal burns, and deadly electric shocks. According to CEA (2015:2), copper cable theft is costly to the electricity sector. With hundreds of incidents occurring in provinces and territories across Canada year after year, copper cable theft costs to electricity utilities are high. While these variables provide a reasonable estimate for a typical incident's costs, they often do not include the cost of additional jobs that are delayed while crews undertake repairs to replace the stolen copper cable.

CEA members argue that copper cable theft costs the Canadian electricity sector approximately \$ 40 million each year (CEA, 2015:11). Canada's electricity sector is not the only sector feeling the impact. Copper cable theft also impacts the construction, rail, and telecommunications sector. Copper cable theft has an impact on everybody and is becoming an issue of national security in Canada. The City of Calgary's police department now has an entire full-time police unit dedicated to the investigation of copper cable theft. Cities across Canada have been plagued by copper cable theft, and the City of Surrey announced that they had spent \$ 3.5 million repairing streetlights damaged by copper cable thieves. In response to this prohibitive cost, the City of Surrey has decided to eliminate copper cables in street lighting and replace it with less

valuable material. While this might be the right strategy for the City of Surrey to take, it means that copper cable thieves will be on the hunt for other sources of copper in the community. Copper and other valuable materials on construction sites or compounds could thus be targeted (CEA, 2015:8).

## **2.5 SUMMARY**

The chapter presented an overview of copper cable theft in South Africa and internationally. The magnitude of copper cable theft was highlighted and supplemented with an overview of its impact on the economy. Particular attention was also given to copper cable theft internationally.

Chapter three focuses on strategies for preventing copper theft.

## CHAPTER 3

### AN OVERVIEW OF STRATEGIES TO PREVENT COPPER CABLE THEFT

#### 3.1 INTRODUCTION

This chapter provides a contextual outline of strategies to prevent copper cable theft. The chapter begins by discussing current SA legislation on copper cable theft. The chapter further presents an outline of prominent role-players combating copper cable theft in the country. The chapter also explores international measures implemented to address copper cable theft. Lastly, this chapter provides a synopsis of the *modus operandi* followed by copper cable thieves.

#### 3.2 AN OVERVIEW OF LEGISLATION PERTAINING TO COPPER THEFT IN SOUTH AFRICA

The SAPS is the custodian of all laws in South Africa and has the responsibility of combating crime such as copper cable theft. To understand the legal response to the crime, it is crucial to unpack the legislative framework regulating copper cable theft in South Africa. This will ensure a better understanding of the law and provide a platform for proper planning in line with the legislative framework. The researcher posits that the legislative framework must be firmly integrated between forensic investigators, legal services, crime intelligence, parastatals, and the DOJ&CD to ensure an effective and efficient criminal justice system response to copper cable theft.

##### 3.2.1 The Constitution of the Republic of South Africa, 1996

Section 205(3) of the Constitution of the Republic of South Africa, 1996 (hereinafter the Constitution) stipulates that the objectives of the SAPS are to prevent, combat and investigate crime, to maintain public order, to protect and secure the inhabitants of the Republic and their property and to uphold and enforce the law.

Section 24 of the Constitution, as the cornerstone of South African law, highlights that everyone has the right to -

- (a) *to an environment that is not harmful to their health or wellbeing; and*
- (b) *to have the environment protected for the benefit of present and future generations, through reasonable legislative and other measures that –*
  - (i) *prevent pollution and ecological degradation;*

- (ii) *promote conservation; and*
- (iii) *secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.*

In light of the above, it is essential to note that once perpetrators have stolen copper cable the material is burnt (thus making the material unrecognizable) and this is usually done illegally in open spaces. This action contributes to pollution and impacts the environment negatively. It also allows for the creation of pockets of criminal activity in certain areas that negatively impact public safety and security.

### **3.2.2 The Second-Hand Goods Control Act 6 of 2009**

The purpose of the Second-Hand Goods Control Act 6 of 2009 is to regulate dealers in second-hand goods and pawnbrokers, to combat trade in stolen goods (including copper); to promote ethical standards in the second-hand goods trade; and to provide for matters connected therewith.

According to clause 4 of the National Instruction 2 of 2016 (which logistically implements the Act):

- (a) *Section 25(4)(b) criminalises dealing in and possession of controlled (non-ferrous) metal (i.e., copper) of which the cover has been burnt. This section of the Act provides that cable consisting of controlled metal of which the cover has been burnt, may not be possessed, acquired, or disposed of unless there is a good reason why the cover is burnt. Any transaction in burnt cable must also be reported to the police before the transaction is completed.*
- (b) *This prohibition will not only assist the SAPS in the detection and prosecution of cable thieves but function as a deterrent to persons who illegally deal in burnt cable, as a contravention may attract a possible maximum penalty of 10 years imprisonment.*

Section 28(1) of the Second-Hand Goods Control Act 6 of 2009, states:

*Routine inspections: A police official may during times when business activity in respect of Second-Hand Goods is taking place, enter the premises of any registered dealer in order to investigate compliance with this Act and require the dealer, owner, an employee, or the person in control of the premises to:*

- (a) *Produce the certificate of registration relating to that premises of inspection;*

- (b) *Produce any register, record, book, or other document relating to the goods in or on the premises for inspection or for the purposes of obtaining copies thereof or extracts there from.*
- (c) *Produce any goods [e.g., copper cable] found in or on such premises for examination; or*
- (d) *Explain any entry or absence of any entry [e.g., copper cable] in any register, book record or document found therein or thereon.*

Furthermore, Section 28(2) states:

*If, upon any inspection, a police official discovers that any method of dealing, recording of transactions in registers or storage that is being used is in contravention of this Act, the Police Official may –*

*Demand immediate discontinuation of the method, and afford the dealer a period of no more than seven days to rectify such method in order to ensure compliance with the Act.*

From the researcher's work experience in ensuring compliance in terms of this Act, he opines that Section 28(1) and 28(2) must be amended to ensure that they have a significant impact on the control of copper cable theft, thus making the enforcement of the Act effective and efficient. Second-hand goods dealers in the industry do not ensure compliance with Act 6 of 2009, especially in terms of Section 28(1) and (2).

### **3.2.3 The Criminal Matters Amendment Act 18 of 2015**

The purpose of this Act is stated in its preamble (which is discussed further below):

*To amend the Criminal Procedure Act, 51 of 1977 (South Africa, 1977), to regulate bail in respect of essential infrastructure-related offences; to amend the Criminal Law Amendment Act, 1997, to regulate the imposition of discretionary minimum sentences for essential infrastructure-related offences; to create a new offence relating to essential infrastructure; to amend the Prevention of Organised Crime Act, 121 of 1998 (South Africa, 1998), to insert a new offence in Schedule 1 to the Act; and to provide for matters connected therewith.*

### **3.2.3.1 Bail in respect of essential infrastructure-related offences**

*Notwithstanding the provisions of sections 59 and 59A of the Criminal Procedure Act, 51 of 1977, an accused person who is in custody in respect of—*

- (a) any offence involving ferrous or non-ferrous metal which formed part of essential infrastructure; or*
- (b) an offence referred to in section 3 of this Act, Criminal Matters Amendment Act, 18 of 2015 (South Africa, 2015) may only be released on bail in accordance with the provisions of section 60 of the Criminal Procedure Act, 1977.*

### **3.2.3.2 Offences relating to essential infrastructure**

In terms of Section 3(1):

*Any person who unlawfully and intentionally –*

- (a) Tampers with, damages or destroys essential infrastructure in; or*
- (b) Concludes with or assists another person in the commission, performance or carrying out of an activity referred to in paragraph (a), and who knows or ought reasonably to have known or suspected that it is essential infrastructure, is guilty of an offence and liable on conviction to a period of imprisonment not exceeding 30 years or, in the case of a corporate body as contemplated in section 332(2) of the Criminal Procedure Act, 1977, a fine not exceeding R 100 million*

### **3.2.4 Common Law**

According to Kemp, Walker, Palmer, Baqwa, Gevers and Steynberg (2018:375&376), the elements of the common law crime of theft are:

#### **o Unlawfulness**

Unlawfulness may be negated by Y consenting to the removal of the property by X. Other circumstances negating unlawfulness include *negotiorumgestio* and the application of the *de minimis* rule.

#### **o Intent**

The element excludes consideration of motive and negligence. The State is not required to prove that the removal of an article (copper cable) was for gain. Nor is it possible to commit theft negligently. The intention must relate to each element of theft.



- **Appropriation**

South African law has adopted the Roman-law element of *contrectatio*, which requires the assumption of control by X of Y's property. However, control may be assumed without the actual removal or carrying away of the article. One school of thought contends that the Roman law of *contrectatio* should be replaced with the more flexible concept of appropriation, which focuses on an assumption of X's ownership rights to the detriment of Y, who has been deprived of his proprietary rights. The property must be capable of being stolen.

To the extent that theft involves the taking of property, it must be physically capable of being moved. This requirement *excludes* from the ambit of theft, the following:

- i. Immovables: For example, buildings, farmland, and so on.
- ii. Incorporeal: These are things that cannot be perceived by the senses, such as rights and duties, instead of corporals, such as a book or a car, which can. Only corporeal, movable things can be stolen.

### **3.2.5 Criminal Procedure Act 51 of 1977**

The Criminal Procedure Act, 51 of 1977 details the procedure for the whole criminal law system, including search and seizure, arrest, the filing of charges, bail, the plea, the testimony of witnesses and the law of evidence, the verdict and sentence, and appeal.

#### **3.2.5.1 Bail Restriction: Section 2**

Section 2 of the Criminal Matters Amendment Act excludes the application of Section 59 and 59A of the CPA. Consequently, there is no discretion for police officials and prosecutors to grant bail to persons charged with essential infrastructure-related offences.

Only the courts may deal with bail applications for these offences in terms of Section 60 of the CPA.

#### **3.2.5.2 Bail Restriction: Section 4**

Section 4 amends Schedule 5 to the CPA by inserting certain essential infrastructure-related offences into the Schedule, including the new offence created in Section 3(1). An accused charged with these offences may only be released on bail if the accused

adduces evidence which satisfies the court that the interest of justice permits their release.

### **3.2.6 The Prevention of Organised Crime Act 121 of 1998**

The Prevention of Organised Crime Act introduced laws that work against organised crime and gang activities, focusing on money-laundering and racketeering or illegal business activities. All illegal activities, as mentioned above, play a key role during copper cable theft. Crimes related to gangs, money-laundering or racketeering can be prosecuted in terms of this Act, even if the crime was committed before the Act came about, or if it was committed by a South African in another country.

The researcher contends that copper cable theft should attract charges for high treason or sabotage where state security is involved or affected by the crime.

### **3.2.7 The Prevention and Combating of Corrupt Activities Act 12 of 2004**

According to the Prevention and Combating of Corrupt Activities Act, corruption and related activities undermine rights, endanger societies' stability and security, undermine the institutions and values of democracy and ethical values and morality, jeopardise governments' sustainable development, and provide a breeding ground for organised crime.

## **3.3 PROMINENT ROLE-PLAYERS IN THE COMBATING OF COPPER CABLE THEFT IN SOUTH AFRICA**

It has become critical that all role-players involved in combatting copper cable theft in South Africa must be integrated and function as one entity with the primary focus on pro-active combating; further enhancing conviction rates for copper cable theft. The following discussion presents an overview of the prominent role-players involved in combating copper cable theft in South Africa.

### **3.3.1 The South African Police Service**

The SAPS Annual Performance Plan 2010/2011:12 (SAPS, 2015:12) indicates that the SAPS must focus on copper cable theft in South Africa. The SAPS derive its powers and functions from section 205 of the Constitution and the South African Police Service Act 68 of 1995. This legislation regulates the police service in terms of its core

functions, which are to prevent, investigate and combat crime, such as copper cable theft.

The Annual Performance Plan 2017/18 (SAPS, 2018:150) states that the National Investigation Unit is responsible for the effective investigation of allocated/instructed case dockets and to prevent, combat and investigate, among other crimes, copper cable theft. The SAPS Annual Performance Plan 2018/2019 (SAPS, 2019:3) states that the Mining Crime Combating Forum and the NFMCCC should be operationalised at the appropriate organisational levels to effectively combat copper cable theft and focus on an operational approach to address theft of copper cable. According to the SAPS Strategic Plan 2014-2019 (SAPS, 2019:17) investigation of the theft of environmental assets and natural resources, namely, non-ferrous metals (copper cable theft, electricity theft), should be pro-active.

#### ***3.3.1.1 Directorate for Priority Crime Investigations***

The DPCI is mandated to prevent, combat, and investigate national priority offences and serious organised crime (such as copper cable theft); serious commercial crime; and serious corruption.

According to Pretorius (2012:14), the mandate of the DPCI can be expanded as follows:

- The DPCI investigates non-ferrous metals related crimes as a national priority crime.
- The DPCI appointed a Champion to deal with organised crime syndicates effectively.
- National and Provincial Desks were established in September 2011, to focus on non-ferrous metals related investigations to enhance co-ordination and investigation of organised crime syndicates.

The courts are also taking this crime seriously, and significant sentences are being handed out to perpetrators. A joint industry working group, formed by Eskom, Transnet, Telkom, the SAPS, the NPA and the SACCI, contributes positively to the fight against this crime. Of the 8 988 cable theft incidents reported between 2012 and 2016, a recorded 1 159 arrests were made. This indicates that something is being

done to avert this crime and indicates that a lot more can still be done to reduce its impact (Gaffar, 2016).

Beukman (2018:1), opines that DPCI had identified 39 hotspots for illegal mining in various provinces including Limpopo, Mpumalanga, North West, Gauteng, and Free State. The DPCI's increased targeting of, and incursions into operational mines, have persisted and they have introduced countermeasures in line with their mandate. Beukman (2018:1) quotes Kadwa the former DPCI Acting Head: Organised Crime Unit who states that 52 cases of copper theft were reported in the first quarter of 2017/18. Kadwa states that a project-driven investigation was initiated during June 2016, focusing on a criminal group involved in theft and dealing in illegal unwrought precious metals.

### **3.3.2 Non-Ferrous Metals Crime Combating Committee**

The strategic objectives of the NFMCCC are as follows:

- Strategic Objective 1: Led by NFMCCC and assisted by the National Intelligence Co-ordinating Committee (NICOC), the NFMCCC co-ordinates and consolidates the government's effort to combat theft and illicit trade in ferrous and non-ferrous metals in partnership with affected industries.
- Strategic Objective 2: All role-players co-ordinated/monitored by NFMCCC (no executive authority). Mitigate theft and illicit trade in ferrous and non-ferrous metals across the illicit value chain (detect, prevent, combat, investigate and prosecute)
- Strategic Objective 3: South African Revenue Protection Association (SARPA) and the involvement of DIRCO to be strengthened by regional and international co-operation to combat infrastructure-related crimes.
- Strategic Objective 4: DOJ&CD to enhance legislative and regulatory frameworks to assist interventions.

There are various multi-disciplinary forums, such as the Intelligence Sub-Committee on Non-Ferrous Metals (ISCNFM), which report to the NFMCCC as the oversight body for non-ferrous metal theft. Individual perpetrators are being addressed with disruptive policing operations whilst syndicates are addressed through covert intelligence operations, utilizing unconventional methodologies. Both strategies continue in court

driven projects where intelligence operatives collaborate with the general detective service or DPCI to address this threat.

According to para. 3 of the SAPS Circular 2/28/23 of 2011 (SAPS, 2011) the mandate as set out below was developed for the NFMCCC to address the theft of non-ferrous metals actively:

- Establishing and maintaining an NFMCCC to address theft and related crimes pertaining to non-ferrous metals.
- Implementing a joint venture between the relevant stakeholders to effectively address crime pertaining to non-ferrous metals on a national and provincial level.
- Co-ordinating integrated crime combating operations that focus on the suppliers/dealers and end-users.
- Monitoring the import and export of non-ferrous metals.
- Launching and implementing a non-ferrous metal anti-crime communication plan and strategy, including educational awareness campaigns.
- Monitoring investigations pertaining to non-ferrous metal-related crimes.
- Establishing governance to deal with non-ferrous metals in SAP 13 stores effectively:  
and
- Establishing mechanisms (training) for the effective identification of non-ferrous by law enforcement officers.

Booyens (2013:1) supports the mandate for implementing the NFMCCC and states that a training manual will further assist the SAPS in effectively implementing the Second-Hand Goods Act 6 of 2009, which came into effect May 2012. The Act stipulates that any person buying stolen goods, including copper cable, is as guilty as the person who stole it. If a dealer is found guilty, a court could impose a prison sentence of up to ten years. The SAPS is the custodian of the NFMCCC and mandated to chair committee meetings. The forum, which was established in 1993, involves role-players such as the SAPS, BACSA, Eskom, Transnet, and JSE-listed telecommunications group Telkom and Metrorail mines, municipalities, and representatives from many government departments. Booyens (2013:1) states further that the NFMCCC holds national and provincial meetings aimed at preventing non-ferrous metal thefts across South Africa. These meetings are currently also conducted quarterly at the station level, illustrating the SAPS's commitment to stopping non-ferrous metal theft.

### **3.3.3 Combined Private Investigations**

CPI is a corporate investigation firm, specialising in investigating non-ferrous metal theft, explicitly focusing on syndicates targeting electrical networks for most of the electricity supply companies and the railway networks. In addition, CPI secures and tracks high-value cargo, with its unique, robust locking mechanisms and its top of the range tracking devices, for both road and rail transportation and logistics agents. CPI also conducts investigations of hi-jacking or theft of any non-ferrous metal or high valued cargo and prides itself in its excellent recovery levels (CPI, 2019).

### **3.3.4 Eskom**

Eskom's mandate is to provide efficient and sustainable electricity, including generation, transmission, distribution, and retail services (Eskom, 2011:13). However, provision of these services are hampered as a result of theft and damage to Eskom infrastructure. According to Noah (2012), Eskom's former Group Executive of Distribution, a total number of 1 591 conductor theft incidents were reported during between April and December 2011 (cable 1 399, overhead conductor 118 and earth straps from substations 74 incidents). Total losses (direct costs) suffered are estimated at R22, 022,855. A total of 292 perpetrators were arrested. Material to the value of R 2, 477,033 was recovered. In response to Eskom's losses suffered, Noah (2012) presents the following strategies:

- Internal strategies, such as, improving the intelligence network, implementation of the Eskom Network Crime Equipment Committee, conduct surveillance, do line patrols, and conduct investigations (Eskom contractor), and awareness creation strategies in conjunction with public safety initiatives.
- External strategies, such as, training of law enforcers on impact and material identification, constructive participation in forums such as NFCCC, scrap dealers disruptive operations, enforcement of the new Second Hand Goods Act, and joint ventures with other state owned enterprises.
- Integrated strategies, such as, joint intelligent gathering and strategy sharing in forums such as the NFMCCC, create localised armed response teams to be deployed when required, patrolling of high risk feeders/lines/cables and infrastructure based on intelligence information and previous crime activities and trends, conduct search operations on illegal scrap dealers, and joint operations with

law enforcement agencies to facilitate successful prosecutions.

### **3.3.5 Passenger Rail Agency South Africa**

According to the Passenger Rail Agency of South Africa Annual Report 2012/2013 (PRASA, 2013), the main aim and principal business of PRASA is to:

*Ensure that, at the request of the Department of Transport, rail commuter services are provided within, to and from the Republic in the public interest, and provide, in consultation with the Department of Transport, for a long-haul passenger rail and bus services within, to and from the Republic in terms of the principles set out in section 4 of the National Land Transport Transition Act, 22 of 2000.*

The City of Cape Town, PRASA, and the Western Cape Government formed a dedicated enforcement unit to focus on Metrorail commuters and infrastructure's safety and security. The Rail Enforcement Unit (REU) consists of 100 officers deployed on 28 October 2018.

The REU has made huge strides in combatting criminal elements which embattle the City of Cape Town's Metrorail services. In 2018, for example, Cape Town's public transportation system suffered a series of severe blows at the hands of shadowy criminal forces. Fire engulfed trains and busses without prejudice, leaving thousands of commuters stranded – adding further strain to the region's already congested roads. Metrorail, a subsidiary of PRASA, bore the worst of the brunt.

The REU has recorded thirty-six arrests on a range of charges including assault, possession of drugs and stolen property, malicious damage to property and copper cable theft. According to the Western Cape department of transport and public works, it has confiscated 379,5 metres of copper cable and 800 kilograms of railway signal cable, among other successes.

### **3.3.6 Metrorail**

As indicated in the PRASA Annual Report (2013) the South African Rail Commuter Corporation (SARCC) is an agency of the Department of Transport responsible for providing commuter rail services in South Africa. It has the custodianship of all commuter rail assets such as stations, infrastructure and rolling stock. Through its wholly owned subsidiary, Intersite Property Management Services (Intersite), new stations are built, upgraded, managed, and maintained. The primary and secondary objects of the SARCC, as stated in the Legal Succession to the South African Transport Services Act 9 of 1989, are to ensure that, at the request of the Department of Transport or any sphere of government, rail commuter services are provided in the public interest, and to promote rail as the primary mode of mass commuter transportation. The secondary objective is to generate income from the exploitation of assets transferred to the SARCC by the Minister of Transport under Section 25 of Legal Succession to the South African Transport Services 9 of 1989.

According to the Western Cape Government (2019:1), vandalism costs Metrorail approximately R 70 million per year. Delayed and cancelled trains lead to lower productivity and job losses. To combat this, Metrorail has started offering monetary rewards for information about copper cable theft and other vandalism; fitted sixteen stations with Close Circuit Television (CCTV) cameras; constructed a wall between Nyanga and Bonteheuwel station to combat criminal behaviour, tightened security and added visible policing.

Dordley (2019:1) reports that during 2018 Metrorail first implemented additional security resources to stop the recurrent incidences of vandalism and copper cable theft on the Western Cape's rail network. The team has responded to more than 258 incidences in the past year and made 347 arrests. The most targeted material proved to be underground signal cable, nearly all of which was recovered by the team. The team recovers on average R 380 722 72 worth of stolen material every month.

### **3.3.7 Telkom**

According to the Telkom Integrated Report (2018:9), Telkom is a leading information and communications technology (ICT) service provider in South Africa, offering fixed-line, mobile, data and information technology (IT) services.



Smith (2013:21) states that the protection and prevention of copper cable theft by Telkom is affected via:

- Alarming of cable routes (on a zoned and priority basis).
- Securing the network.
- Welding manhole lids.
- Covering cable runs with concrete.
- Burying cable runs up to 2 m deep.
- Replacing overhead with underground cable.
- Replacing wooden poles with steel or concrete.
- Lashing overhead cables to steel wires.
- Securing the bottom of wooden poles with concrete or metal mesh.
- Deployment of contracted armed response teams.
- Patrolling of identified hotspots.
- Special hot-spot initiatives, including the use of helicopters.
- Raids on suspected scrap dealers in co-operation with SAPS.

### **3.4 AN OVERVIEW OF INTERNATIONAL MEASURES TO ADDRESS COPPER CABLE THEFT**

To establish a feasible method to mitigate copper theft in South Africa, it is essential to explore the accomplishments and failures of copper cable theft prevention initiatives implemented in other countries. Consequently, the section hereunder explores measures implemented to mitigate copper cable theft in the USA, UK, France, Italy, Germany, and Bulgaria.

#### **3.4.1 United States of America**

According to a report from the FBI Criminal Intelligence Section (2008:1), industry officials have taken counter strategies and measures to address the copper cable theft problem. These include installing physical and technological security measures, increased collaboration among the various industry sectors, law enforcement partnerships and sharing of best practices. Many States are also taking countermeasures by enacting or enhancing legislation regulating the scrap industry to include increased record-keeping requirements and penalties for copper theft and non-compliant scrap dealers. However, there are limited resources available to enforce

these laws, and a small percentage of perpetrators are arrested and convicted. Additionally, as copper thefts are typically addressed as offences (instead of felonies), those convicted pay relatively low fines and serve short prison terms.

According to Schoenfelder (2009), the typical change in legislation involves increasing penalties for theft of copper cable and other metals and initiating new or increasing existing reporting requirements for vendors, such as recycling facilities, which buy scrap metal.

According to Schoenfelder (2009), some successful strategies and techniques used by other organisations in preventing the theft of copper cable include:

- Using Copper Keeper, a wire locking device that can be installed in conduit.
- Installing tamper-resistant units on cabinets, poles, and pull boxes.
- Performing security assessments on critical locations and taking hardening measures, including apprehending thieves instead of chasing them off.
- Limiting the storage of copper cable to service centres and not using outlying facilities.
- Placing guards on job sites.
- Installing wiring and security devices on all job sites.
- Burying pull boxes.
- Installing alarm systems in the pull boxes.

Other organisations' unsuccessful techniques for preventing copper cable theft include covering pull boxes with concrete slab and police surveillance.

Schoenfelder (2009) indicates other techniques being used, which have unknown or inconclusive results include:

- Purchasing an enclosed trailer to move the copper cable from site to site.
- Requesting local law enforcement to look out for copper thieves.
- Asking the public through the media to report suspicious activities.
- Using Data Dots.
- Using security screws.
- Delivering copper material on an as-needed basis.

- Painting copper grounds at substations.

While police seek suspects, the Metropolitan Transportation Authority, which runs the subways has installed more high-intensity lighting and surveillance technology in vulnerable locations. (Associated Press, 2015), the transit police chief, has also created a special unit to investigate these types of thefts, with undercover officers conducting sting operations at salvage yards (Associated Press, 2015). According to West Bend (2020:1), the following steps can be taken to avoid the ever-growing theft of copper cable:

➤ **Paint copper black**

An easy and inexpensive way to deter copper thieves is to paint all copper components black. This causes the copper to look like regular, worthless plastic tubing that no one would waste the time to steal.

➤ **Fence areas containing copper**

Areas containing copper items are always a potential target, and depending on the value of the item, a fence may be worth the investment. The amount of copper in most commercial air conditioners is never worth a significant amount, but the actual cost comes from the unit's destruction.

➤ **Install an alarm system**

Installing an alarm system to protect the copper from theft is a great way to deter potential thieves and catch those who attempt to steal. There are many alarm systems, and choosing one will depend on the location and type of object in need of protection. For heating and cooling units, for example, some alarms are triggered if the unit stops working.

➤ **Security cameras**

Aside from deterring prospective thieves, surveillance cameras can help police capture thieves, resulting in either the return of stolen goods or offenders' incarceration, thus preventing future thefts.

➤ **Hire security guards**

Ninety per cent of all copper theft in the USA occurs during the night or over weekends, which is logical since these times are when business premises are most likely empty. Recognising the increased risk of theft during these periods can significantly

reduce the chances of copper theft. Hiring staff or security personal to monitor the facility during these periods can significantly reduce the chances of a severe loss.

### **3.4.2 United Kingdom**

In 2012, UK law enforcement and the British Metals Recycling Association introduced a joint programme called Operation Tornado (Wiltshire Times, 2013: 1). Cook (2015: 43) explains that Operation Tornado was first started in County Durham - an area severely impacted by copper theft - to reduce copper theft incidents by placing a significant investigative and regulatory emphasis on the scrap dealers' functioning in the UK. According to O'Donnell (2012), as part of Operation Tornado, licensed scrap metal dealers operating in the county agreed to buy scrap metal only after receiving valid photo identification from the seller and then maintaining a copy of the identification for six months. The sale of scrap metal in exchange for cash payments without proof of identification is long believed by law enforcement to be a significant reason why copper theft is such a lucrative enterprise. In addition to the enhanced regulation, law enforcement entities, including the Durham, Cleveland, and Northumbria Police Forces, continued a multi-jurisdictional effort to identify and arrest known copper wire thieves. Additionally, regulators undertake periodic, and unannounced inspection visits to scrap dealers to ensure compliance with the regulation.

Operation Tornado appeared to demonstrate that the programme's licensing component had a considerable effect on crime rates. The British Transport Police (BTP) reported that County Durham reported a 55 per cent reduction in copper theft and a 60 per cent decrease in copper wire theft from railroad property patrolled by the BTP. Operation Tornado's success caused the government to take notice, and a strong effort was made to find ways to replicate the success of the operation nationwide. The National Metal Theft Task Force, led by the British Transport Police, was launched in conjunction with Operation Tornado in January of 2012. Francavilla (2014) explains the task force initially included the BTP, local and regional police forces, representatives from several industry associations, insurance companies, and the British Metals Recycling Association. Developing from the task force and Operation Tornado's achievements, a legislative resolution responding to the metal theft challenge was passed by the government in early 2013. The Scrap Metal Dealers Act

of 2013 became law on February 28, 2013. Several conditions of the new law were included because of the National Metal Task Force and Operation Tornado. In terms of the law, scrap dealers are no longer allowed to pay for scrap metal with cash payments. Instead, all transactions must occur by either cheque or electronic transfer, thus ensuring an everlasting record of the transaction. Stolen scrap metal sold to a licensed dealer could therefore be effortlessly traced by law enforcement by merely viewing the recorded identify of the seller, as well as tracing the financial transaction (Cook, 2015: 45).

### **3.4.3 France**

Cook (2015: 56) explains that the French response to the escalating number of copper wire thefts has been varied, depending on various legislative, governing, and official enforcement techniques. Resulting from the country's geographic position in Europe, France has had significant challenges from organised crime metal syndicates frequently intersecting its borders. The Connexion (2011:1) describes how the French embarked on a series of co-ordinated criminalisation ventures combined with new physical security techniques. To discourage copper wire thieves that damaged railway infrastructure, the French National Railway (SNCF) entered into an agreement with the *Gendarmerie*, which operates its cable theft operations through a central office, to provide aerial helicopter watches, consisting of high technological thermal imaging, over its infrastructure. These aerial patrols were also intended to examine power lines. Furthermore, the SNCF also procured the latest technology intended to hamper copper wire thieves, for example, a state-of-the-art electronic warning system invented to alert staff instantly of theft, while also alarming the police.

In addition, the French government embarked on multiple law enforcement projects, for example, the *Gendarmerie*'s involvement with Europol, Interpol and Railpol which resulted in the arrest of numerous scrap metal thieves (Cook, 2015:56). Cook (2015:57) further explains that in 2010, the French government amended legislation governing the scrap recycling industry. This amendment put an end to cash transactions for copper or other scrap metal worth more than \$ 600. Kane (2011) applauds the French governments' firm stance explaining that legislation has been revised even further by doing away with cash exchanges for any scrap metal.

The French government continued with its strict legislative and regulatory approach to scrap metal theft by implementing even firmer rules on licensed scrap dealers operational in France. All scrap dealers must maintain a record of all scrap materials purchased, including a description of the item, and a copy of the seller's identification (Pol-PRIMETT, 2011). Scrap dealers are now obliged to keep the records for five years, and any contravention of the law results in serious criminal consequences, including incarceration and weighty financial penalties.

#### **3.4.4 Italy**

Cook (2015:69), points out that Italy has followed an approach, which is different to France and the UK, and depends on conventional law enforcement approaches and strengthening teamwork between the various role-players responsible for combating copper cable theft in the country. According to Delfini [s.a.], law enforcement operations within Italy have generally consisted of three different operation levels. The first level focuses on action against individual offenders and organised crime groups, the second on detecting black-market handling channels, and the third on detecting illegal export channels. However, according to Pol-PRIMETT (2011), data from the railway sector illustrates that law enforcement actions have had minimum impact on copper theft.

In a discussion paper, the Council of the European Union (2014) illustrates the Italian government arguments for several reform bills to combat copper theft. However, due to widespread political differences, the government was only allowed to authorise legislation amending the criminal code to add aggravating circumstances to any theft found to include scrap metal. The legislation explicitly includes stricter punishments for any offence believed to be related to the theft and the “...*handling and receiving of copper, metal components or other material stolen from infrastructures for power supply, transport, telecommunications, or other public services which are managed by public/private entities under public concession schemes.*” According to the European Crime Prevention Network (EUCPN), apart from conventional law enforcement endeavours and minor legislative amendments, the Italian government developed an innovative and co-operative programme involving a selection of the principal role-players to limit copper theft. Consequently, in 2012, the National Monitoring Centre on

Copper Theft was founded to improve collaboration among law enforcement bodies and the organisations working to prevent copper theft.

#### **3.4.5 Germany**

According to an International Union of Railways (UIC), Security Platform report (UIC, 2013) the German state railway (*Deutsche Bahn*) uses synthetic Deoxyribonucleic acid (DNA) to mark its infrastructure resulting in the easier tracing of recovered scrap metal, including stolen copper. Prospective buyers are thus able to detect stolen goods. The DNA attaches to everyone who comes into contact with the material. *Deutsche Bahn* further collaborated with primary telecommunications and energy corporations, such as *Deutsche Telekom*, the utility provider RWE, and the Association of German Metal Dealers, to form the Association of German Metal Traders to improve the monitoring of scrap metal (Lichtenberg, 2012:1).

#### **3.4.6 Bulgaria**

Pol-PRIMETT (2013:176-181) demonstrates the primary police methods used to address metal theft in Bulgaria. These include continuous administrative control of metal dealers, telephone tapping and electronic espionage, and monitoring of sites and movements of trucks transporting metals using Global Positioning System (GPS) connected to an information system. Once a company's central managing office is informed of property attacks, the police are also notified of such threat. However, often responses are too late since one of the shortcomings is that many trucks are not equipped with GPS systems. However, corporations have initiated prevention measures by, for example, implementing advance monitoring protocols for trucks including names and registration plates, details of the driver, photographing cargo, changing of routes and time schedules, instructing trucks to stop only in parking areas with an elevated level of organised surveillance, instructing trains to move without stopping or decreasing speed or to stop only at secure stations. Increased surveillance inside plants, transportation by train, and secure transportation of cathodes have also been implemented. Other measures include armed guards, video surveillance, metal detectors, and special security procedures, like locking electrical panels, boards, and transformers in the stations using a secret closing system or placing transformers high

on the electric platforms. In some of the most at-risk regions, guards monitor energy facilities on a full-time basis.

However, Pol-PRIMETT (2013:176-181) reports that in the past 15 years, the number of methods implemented to limit metal theft has not been adequate. Consequently, broader measures to reduce copper theft are proposed, such as co-operation between various law enforcement units, society, and scrap dealers. Although such collaborations exist, there is room for improvement, particularly regarding control measures. The primary challenge is the public law governing the purchase of non-ferrous metals as scrap.

### **3.4.7 South Africa**

The court in *Lindeque and Others v Hirsch and Others, In Re: Pre-paid<sup>24</sup> (Pty) Limited* (2019) states that although many cable thieves are apprehended, only 7 per cent of offenders are prosecuted because of the difficulty of proving cable ownership. CableDNA, a South African company, has unveiled a revolutionary cable identification method to overcome the problem. In *Lindeque* (2019:1), the court states that South Africa loses an estimated R 10 billion per year in productivity, the loss of lives, and decreased service provision due to copper cable theft. Proving ownership of stolen electrical cable is impossible for law enforcement officials worldwide. Thieves are caught at great expense and effort – but often the courts cannot convict them because cable ownership cannot be proven. Philip (2014:1) states that one strategy to curb copper cable theft is to paint or spray barely visible micro-dots onto both copper cable and steel infrastructure to allow the police and parastatals to identify cable as stolen and instantly identify its owner.

Van Dalen (2017:2) states that the illegal trade in non-ferrous metals has become a multi-million Rand industry in South Africa, involving all social classes. Equipment and copper cables containing non-ferrous metals has proven to be the most dominant targets. Other strategic articles like drain covers, solar panels, water meters and transformer oil are also targeted. Van Dalen argues that all role-players must investigate suspects and work closely together following effective and efficient processes to combat copper cable theft. However, Van Dalen believes that such close co-operation may be challenging because the various role-players have their own



ideas and strategies in the fight against crime. Van Dalen (2017:2) additionally cautions that the time has passed where the SAPS are the sole protectors against crime, and he calls for the public (partnership policing) to assist in the prevention of copper cable theft.

Arendse (2010:39) posits that the NFMCCC operates as a forum to identify trends, give strategic guidance and co-ordinate operations, but that the SAPS is still not making use of a specific crime category or prioritising copper cable theft as a priority crime which makes it a challenge to determine accurate statistics. Too many incidents occur without detection by the SAPS. The specialised training of judicial officers is not offered at the grass-roots level, and resultantly too many cases are withdrawn or prosecuted ineffectively by the NPA. BACSA, as an NFMCCC partner, is still investigating the issue of increased export control. The potential marking of cables has been considered but remains a challenge. According to Chetty (2010:2), Telkom in a strategic move has decided not to replace stolen copper cables but focuses on providing affected customers with wireless services.

Goosen (2017:1) suggests that a geospatial intelligence (GEOINT) analysis to predict and prevent copper cable theft should be implemented in the Gauteng region supported by geospatial software. Goosen argues further that the full power and benefit of GEOINT is realised from the integration and analysis of its three core capabilities: imagery, imagery intelligence and geospatial information. This can facilitate a comprehensive visual representation of an environment based on a common operating picture (COP). The latter will enable forensic investigators to understand the bigger picture relating to copper cable theft in a specific area pro-actively. Furthermore, it allows for in-depth crime pattern analysis using descriptive and predictive models such as hot spot identification for copper cable theft.

The fundamental strategy of a Command, Control, Communication, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) approach is gaining information dominance over a geographical area where copper cable theft is prevalent. This approach has resulted in better command and control of finite resources, improved situational awareness and more effective decision making. However, this

approach requires a higher level of trained individuals, integrated sensor data and geospatial software systems that incorporate useful analytical capabilities. This presents a significant challenge for many security companies. Pretorius (2012:63) alluded to a lack of such capacity and skills in the South African security sector.

Booyens (2013:3) believes that the most inventive and cost-effective solution to prevent copper cable theft involves marking cables. He states that “*Cable manufacturers are working on a marking standard for cables produced in the future. Eskom, for example, cuts a groove into its aluminium cables, which are also being targeted, to prove that the cables belong to the entity*”. Bindeman (2011:5) argues further that there are many initiatives regarding the marking of the copper cables. In South Africa, where most copper cables are unmarked, the marking of copper cables will make the products traceable and deter thieves. If copper cables can be marked in one way or another, it may reduce copper cable theft in the future. Bindeman (2011:5), states that there are five marking techniques. The conductor or cable can be directly marked on the surface, or the surface of its internal components, by using a method that either etches, indents, prints, sprays, or employs any other direct marking technique.

According to the court in *Lindeque* (2019:2), this strategy allows law enforcement officials to identify cables with their GPS coordinates, specific cable runs and their owners’ details using a smartphone 24/7/365 from anywhere in the world even after the insulation has been burnt or stripped and copper has been granulated. Van Zyl (2016:1) believes that cable theft has cost Telkom over R 200 million in losses during the 2015 budget year alone. Van Zyl (2016:1) argues that Telkom experienced over 6 000 incidents of copper cable theft across its copper cable network during 2015. Telkom’s new strategy is to migrate customers to wireless and fibre technologies to lower copper availability to theft syndicates. O’Sullivan, Telkom’s Group Executive for Communications (2016:1) stated that the price of copper and its strong demand in international markets are catalysts for the occurrence of crime and that copper cable theft has become more sophisticated over recent years. Resultantly the industrial equipment supplier *Banding and Identification Solutions Africa* has seen a rise in demand from the electric power sector for its Ultra-Lok open-end clamp, owing to copper cable theft causing substantial disruptions to South Africa’s power supply (O’ Sullivan: 2016:1).

Wilkinson (2017:4) opines that Ultra-Lok was initially introduced to the South African market in 2007 as a high-pressure hose assembly clamping solution but highlights that it has proven successful in preventing copper cable theft. The Ultra-Lok clamp provides a robust and efficient tamperproof solution that can drastically decrease cable theft in South Africa. Various South African companies have developed and implemented innovative copper cable theft mitigating measures, such as robust and corrosion-resistant clamping systems which lock firmly over the external copper cable attached at 5 to 10-metre intervals. This clamping system is swift and straightforward to attach and resists pulling or force exertion. These clamps further avert lengthy pieces of cable being hauled by powerful vehicles from underground trenches. Another innovative solution involves a wireless, self-powered system which provides video confirmation when alarms and signals are activated by copper cable theft in progress. This system is called *Videofied*. It immediately alerts the monitoring staff of attempted theft by providing video footage of the event.

Moreover, a South African security solutions company, *Holomatrix*, developed a system, called *Authenticable*, a direct Polyester (PET) tape system with three unique identification mechanisms: a printed serial number or barcode, a nickel holographic micro-dot bearing a unique code and an invisible DNA taggant. The chronological printed serial numbers are recorded every 2,5 centimetres. The micro-dots are ingrained in the PET carrier, and the DNA trace is imprinted along the carrier. The tape is fixed into the conductors' core while being manufactured and fits with present production methods. The micro-dots and DNA can survive exposure to fire. The result is a unique, accurate identification and the ability to trace every bit of cable (Hi-Tech Security Solutions, 2011).

It is trite that ferrous and non-ferrous metals and essential infrastructure-related crimes impact society and the government alike. Conventional and unconventional methods are employed to prevent the adverse effects of this threat. South Africa has a well-developed infrastructure consisting of a large rail, road, air, and sea network. Added to this it has strong telephone and electricity distribution networks. This substantial infrastructure was built up over decades when metal was inexpensive and used abundantly to construct roads, bridges, railway lines, and electricity and telecommunication distribution networks. Pretorius (2012:1) states that the potential

future threat to infrastructure via copper thieves was not considered at that time. Infrastructure crimes (ferrous, non-ferrous, and essential infrastructure-related crimes) remain a national priority that should be addressed operationally; primarily to combat the scourge and strategically control and prevent future occurrences. The key drivers of copper theft include socio-economic aspects like poverty, unemployment, and the continually flourishing scrap metal and recycling markets. Copper and aluminium theft have existed for many years and have intensified to such an extent that losses run into millions of Rand annually. Exacerbating this is the steady increase in copper prices. The increasing value of copper cable creates a lucrative market for the theft and exportation of illegal copper products regionally and internationally.

### **3.5        *MODUS OPERANDI***

A forensics investigator must clearly understand the *modus operandi* for copper cable theft to ensure an effective investigation and successful conviction.

Torkelson (2010:1 & 2) states that organised crime networks have been implicated in the theft of miles of copper cable from peri-urban and rural areas in Gauteng, the North West and KwaZulu-Natal. Many criminal networks are domestic, but recent evidence suggests the involvement of militarily trained cells from Southern Africa. Their *modus operandi* entails stealing underground cables in the early hours of the morning, or from electrical substations, construction sites or vehicles in transit. Criminals use hired vehicles to transport the copper. The perpetrators may even use trucks and ambulances. Organised syndicates always rely on inside information and expert reconnaissance.

Torkelson (2010:1 & 2) states further that the consistently high price of copper makes it a valuable commodity for illicit business. Thieves are sophisticated market analysts, who decide when the price of copper has risen to a point where the crime (weighed against the risk) is more financially rewarding than any other. Copper is widely available, poorly secured, and easy to steal due to the extensive transportation, power and communications networks operated by Transnet, Eskom, and Telkom. It is also effortless to sell, due to eager scrap dealers looking to profit from the global price

increase. Consequently, many actors - from petty thieves and organized criminals to scrap dealers and private security companies – benefit from this illicit economy.

According to Marsh, Melville, Morgan, Norris, and Cochrane (2011:56) “...for many centuries we have attempted to find out which people are likely to become criminals and what elements or *modus operandi* drives specific individuals to commit a particular type of crime in the first place.” Over the years psychologists have considered a range of different explanations to answer these difficult questions. Some have argued that there may be a genetic explanation at the centre of criminal behaviour, while others have suggested that it is the environment and external elements in which people live that can influence their chance of becoming a criminal.

Venter (2008:1) states that “...the typical small-time copper thief is a subsistence criminal who is financially underprivileged.” These subsistence criminals' despondent disposition is capitalised on by organised crime syndicates that employ them to steal. However, they are in the minority as gangs are responsible for most copper thefts, while large cartels operate in the scrap trade (Pretorius, 2012:1). Labuschagne (in Zinn and Dintwe, 2015:277) believe that a *modus operandi* analysis enables law enforcement agencies to allocate resources better. The researcher supports the view put forward by Marsh *et al.* (2011:57), which was also found to be the case at the SAPS at Philippi East.

Geldenhuis (2008:1) confirms that copper thieves fall into two groups: organised crime syndicates, who tend to export their loot; and subsistence thieves who steal a couple of meters of cable at a time to survive financially. Moreover, Torkelson (2010:1) states that petty criminals comprise the first group benefiting from copper cable theft. Torkelson further states that petty criminals are often already involved in collecting scrap metal for subsistence purposes. Drodskie (2018:1), the Executive Advisor to the SACCI posits that copper theft seems to be driven by syndicates.

According to Le Roux (2008:1), in Telkom's experience, most of the repeat offenders are undocumented immigrants who, when caught, are deported to their countries of origin, only to return to South Africa to commit the same crime again. The

undocumented immigrants fall almost entirely into the subsistence crime categorisation, but some are military personnel using their unique training and tactics to commit the crime. In many high-theft or hotspot areas, copper cables are repeatedly stolen, sometimes within days of replacement or repair. This implies that local repeat offenders are involved. These criminals are aware of the weaknesses and the strengths of security and their calculated chances of being caught (Le Roux, 2008:1).

Participants from a study conducted by Pretorius (2012:2) confirmed that “...*copper cable thieves serve in all capacities; from police officers, contractors, employees, security officers, service providers and corporate management.*” Some copper cable theft syndicates and copper cable theft specialists were highly qualified and well-trained individuals with the influence and ability to run criminal operations. The higher the criminal's capacity, the better the level and size of equipment used, from excavators to specialised vehicles and copper recycling equipment. Thieves use rudimentary tools in lower-level criminal groupings, including bolt cutters, saws, poles, and rubber bands for isolation and binding.

Pretorius (2012:2) further found that in general, copper cable thieves take time to plan and survey; they knew their area and environment in detail. They knew the security ability and processes, and precisely where soft target areas are located. Copper cable thieves are seldom caught on the job, as remote environments and well-placed observation posts give these criminals a benefit, and because they act primarily at night, the darkness in an ally facilitating escape. Copper thieves always look for weak spots and vulnerable places, and their patterns change, but their methodology invariably remains the same.

Liebenberg (2018: 27) describes how cable thieves pro-actively collect information and identify risky areas. These criminals typically concentrate on cables in predetermined areas identified through their prior involvement with such activities. Though each situation varies, the method of cutting the cable remains identical. The tools used are relatively basic but adequate for the cause. Copper thieves use innovative methods, such as hacksaws or bolt cutters joined to a shaft enclosed in a rubber casing to cut overhead cables.

Le Roux (2008:1) explains that copper cables are continually stolen in various recurrent theft areas, occasionally within days of having been replaced or repaired, suggesting that repeat offenders commit these crimes. These offenders are aware of the shortcomings and the [in]ability of the security system and their estimated probabilities of being caught. Geldenhuys (2008:10) further states that copper thieves usually operate at night. The more sophisticated syndicates are equipped with trucks, winches, mechanised cutting equipment, and tractors; to knock over the masts and poles to reach the copper cable. They make use of internal and external experts to ensure their protection and security. These syndicates steal and sell copper in large volumes.

### **3.6 SUMMARY**

This chapter presented an outline of strategies to prevent copper cable theft. The chapter commenced with a discussion of current SA legislation governing copper cable theft and applicable punishments. This chapter further presented the primary role-players in combating copper cable theft in South Africa and explored international methods to address copper cable theft. Consequently, this chapter ended with a summary of the *modus operandi* followed by copper cable thieves.

In Chapter four, the researcher deals with the findings and presents the themes and sub-themes arising from in-depth interviews.

## CHAPTER 4

### PRESENTATION OF RESEARCH FINDINGS

#### 4.1 INTRODUCTION

The objective of this chapter is to present the research findings garnered from the study. The participant experiences and insights catalyse the presentation of research findings on the impact of the NFMCCC on copper cable theft in South Africa. It is essential to explore participant experiences and the day-to-day reality of role-players that make up the NFMCCC. The participants whose experiences are described in this chapter are part of the narrative that contributes to an improved understanding of the impact of the NFMCCC on copper cable theft in South Africa.

In this chapter, the researcher presents the experiences of the various sample groups included in this study concerning the impact of the NFMCCC on copper cable theft. The experiences of sample group A, which included ten participants awaiting trial on copper theft charges, are presented first. Questions posed to these awaiting trial prisoners could provide insight into the NFMCCC's impact on combatting copper theft. The NFMCCC could eventually adapt its strategies and subsequently improve its impact on copper cable theft once the Committee has an improved understanding of copper cable thieves' modus operandi and strategies.

Thereafter the experiences of sample group B, which included two participants from BACSA (a founding member of the NFMCCC that later became the NFMCCC), are presented.

The experiences of ten participants from CPI are presented as sample group C.

The experiences of sample group D include role-players who form part of the Mpumalanga and Gauteng Provincial NFMCCCs.

To ensure that the aim and the research purpose of this study are met according to the research questions, as discussed in chapter one (para. 1.6) the researcher conducted in-depth interviews with the sample mentioned above (groups A-D). A



qualitative research method was used as described in chapter one (para. 1.14) to ensure the in-depth interviews' trustworthiness. The researcher also considered ethical considerations, as reflected in chapter one (para. 1.15).

These results are presented through themes and sub-themes, exploring the participants' subjective experiences, knowledge, and opinions about the impact of the NFMCCC on copper cable theft. As mentioned in chapter one (para. 1.12) in-depth interviewing consists of face-to-face encounters between the researcher and participants directed towards understanding participant perspectives from their lives, experiences, or situations expressed in their own words.

The results of the in-depth interviews are presented and discussed below.

#### 4.2 RESULTS ORIGINATING FROM INTERVIEW WITH SAMPLE GROUP A

Table 4 (Sample Group A) below illustrates the emergent themes and sub-themes resulting from in-depth interviews with awaiting trial detainees charged with copper cable theft (sample group A).

**Table 4 (Sample Group A)**

<b>THEME 1</b>	<b>Participant perceptions/awareness of the damage caused by copper cable theft</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 1.1: Learned awareness of general consequences.</li> <li>- Sub-theme 1.2: Awareness of damage to infrastructure.</li> <li>- Sub-theme 1.3: Loss of potential work opportunity and services due to damage to infrastructure.</li> <li>- Sub-theme 1.4 People can get hurt.</li> <li>- Sub-theme 1.5 No general awareness or understanding of the economic implications of cable theft.</li> <li>- Sub-theme 1.6 Economic implications for the perpetrator.</li> </ul>
<b>THEME 2</b>	<b>Planning the copper cable theft</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 2.1 Pre-planned gang/group strategy for stealing copper cables.</li> <li>- Sub-theme 2.2 Going alone or casually involved with a friend or help for a group.</li> <li>- Sub-theme 2.3 At the wrong place at the wrong time.</li> </ul>

THEME 3	<b>Training for the offence (copper cable theft)</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 3.1: No training but learning by observing others or simply taking a chance.</li> <li>- Sub-theme 3.2 Planning for the offence, but not part of a gang.</li> </ul>
THEME 4	<b>The motivation and incentive to commit copper cable theft</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 4.1 Making money from buyers of scrap metal for living expenses.</li> <li>- Sub-theme 4.2 Satisfying expenses related to drug addiction.</li> </ul>
THEME 5	<b>Facilitating/reinforcing factors for copper cable theft</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 5.1 Burnt trains and load shedding.<sup>1</sup></li> <li>- Sub-theme 5.2 Corrupt security officers involved in the offence by taking bribes.</li> </ul>
THEME 6	<b>Executing the alleged offence (copper cable theft)</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 6.1 Choosing between “<i>Anacondas</i>”<sup>2</sup> and “<i>shiny bright</i>.”<sup>3</sup></li> <li>- Sub-theme 6.2 Cutting overhead copper cables (less time consuming, although more dangerous).</li> </ul>

The researcher presents and discusses sample group A's responses by quoting responses verbatim as received from participants.

The first theme that emerged from in-depth interviews with awaiting trial detainees charged with copper cable theft (sample group A) explores participant's perceptions/awareness of the damage caused by copper cable theft.

#### **4.2.1 Theme 1: Participant perceptions/awareness of damage caused by copper cable theft**

This theme presents participant responses regarding their perceptions/awareness of the damage they cause when committing copper cable theft. The answers to the following question gave rise to this theme:

<sup>1</sup> Load shedding, or load reduction, is implemented countrywide in South Africa as a controlled option to respond to unplanned events to protect the electricity power system from a total blackout. While Eskom uses the word blackout loosely to mean “no lights” in a local area, a country-wide blackout has much more serious consequences, which can occur when there is too much demand and too little supply, bringing the power system into an imbalance – tripping the power system in its entirety.

<sup>2</sup> *Anacondas* is the term used by copper thieves to refer to underground copper cables. These cables are thick, heavy, and long (similar to an Anaconda snake).

<sup>3</sup> *Shiny bright* is the term given by copper thieves to overhead electricity cables.

*Are you aware of the damage caused to essential infrastructure and the impact on basic services and the economy resulting from copper cable theft?*

The purpose of this question was to explore participant awareness of the damage they cause to essential infrastructure and the subsequent impact on basic services and the economy when committing copper cable theft.

After analysing the data derived from the in-depth discussions, it became apparent that all 10 participants aver that they were not aware of the actual damage caused to essential infrastructure during the crime. The participants only became aware of the offence's seriousness (particularly the costs involved to repair the damage caused) when they appeared in court on arraignment.

A discussion of the sub-themes under Theme 1, follows hereunder.

#### ***4.2.1.1 Learned awareness of general consequences***

The following responses regarding awareness of copper cable theft's consequences indicate that the participants developed such awareness only while in custody.

One participant conveyed that he eventually became aware of the damaged caused to essential infrastructure and the impact on basic services and the economy resulting from copper cable theft:

*I realised that the thing about cables being stolen is that the trains can't run. It doesn't just affect the railway lines; it affects businesses, and this affects hospitals, and many people can't go to work."*

Another participant who was severely burned when touching a live wire stated that he was not aware of the damage caused by copper cable theft:

*I was not aware, but I am aware now. I didn't cut anything. I just touched it, and as I touched it, it felt like a shot. I got burned 70% and was in the hospital for a very long time.*

#### **4.2.1.2 Awareness of damage to infrastructure**

The majority of participants indicated an awareness of damages to infrastructure after the researcher clarified the concept. Participants conceptualized the damages to infrastructure resulting from copper cable theft as follows:

- *As far as I understand if we steal the copper, we are going to be short of lots of thing.*
- *A lot of damage is being done. People can't go to work if you steal cables. If maybe that cable runs to Pollsmoor there would have been no power today – no computers, not electricity, everything working with electricity would be off.*
- *The trains cannot run. I think there in Netreg / Bonteheuwel, there are not trains there. I don't even know the day I am released from prison how I will get home if there are no trains.*

#### **4.2.1.3 Loss of potential work opportunities and services due to damage to infrastructure**

Participants overwhelmingly acknowledged the loss of income or jobs because of copper cable theft:

*If you steal copper the people can't go to work because the trains are all stationary and there is also no electricity at home.*

*It causes a lot of damage. People cannot do their jobs because there is no electricity and according to me, copper cable theft has a big impact on the economy.*

Disturbingly, one participant was aware of the impact of copper cable theft on infrastructure as well as basic and essential services; however, he continued committing the crime: *"If one steals copper then the trains cannot run. People can't go to work and may lose their jobs. In hospitals, people who are sick can die because there is no electricity."* Interestingly, another participant showed remorse for the damage caused by copper cable theft: *"The service is poor because people can't go to work. Nothing works and that is not right."*

#### **4.2.1.4 People can get hurt**

Participant awareness of potential physical injury or death due was only mentioned as an afterthought.

*The building where the copper cables are being stolen can catch fire. There can be people inside who can get hurt too.*

*Because of one stolen copper cable people who are lying in sick beds can also die.*

*I am aware that trains can cause accidents during power failures and people can get hurt or even die.*

#### **4.2.1.5 No general awareness or understanding of the economic implications of cable theft**

From the information derived from participants, it became evident that some participants lacked general awareness or understanding of cable theft's economic implications.

*I don't know and I am not aware of that.*

*I don't know what is going on with the country's economy.*

Some of the participants agreed that they are aware of the prohibitive cost of repairing or replacing damaged infrastructure as well as the snowball impact on the economy and the business sector:

*It is going to cost millions to put that copper cable back.*

*It is also companies that suffer when people cannot get to work. So, it is not just Metrorail and PRASA alone suffering but it is companies also in the whole process because people cannot get to work.*

*There is a lot of poverty, and if there is no work or the people cannot get to work the poverty will never stop.*

#### **4.2.1.6 Economic implications for the perpetrator**

One participant stated the fact that he was unaware of the value of the copper he had stolen and only became aware of the value of the stolen copper in court:

*I am talking about myself when I appeared in Court. The prosecutor asked the Magistrate the value of the piece of copper that I stole, and that is when I heard it is R 20 000.00.*

The second theme from group A explores participant planning and execution of copper cable theft.

#### **4.2.2 Theme 2: Planning copper cable theft**

This theme presents participant responses regarding their planning and execution of copper cable theft. The answers to the following question gave rise to this theme:

*Did you plan the copper cable theft before execution?*

The purpose of this question was to explore participant actions before committing copper cable theft. The sub-themes arising from Theme 2 are explored below.

##### **4.2.2.1 Pre-planned gang/group strategy for stealing copper cables**

Participant responses to a question on planning and executing the alleged offence indicated that only two participants were part of a group that specifically planned the alleged offence. Accomplices perform prior surveillance and subsequently inform perpetrators when it is safe to execute the crime.

Two participants explained how they performed prior planning and surveillance before executing the crime. One participant acknowledged that copper cable thieves have evolved into skilled and trained criminals:

*We maybe three who are going to steal the copper cable. Two may know the way to the train track or the way the police know how to get there. One will maybe sit there and the other one will maybe just walk around there. When we don't hear from them then we know that it is safe, but if they tip us of that the police are coming then there is enough time for us to get away without being caught.*

*We are not a business or organisation, but the people who are doing it now are quite smart. We are not talking about small trades that people do. They do planning. They discuss first and explain their plans and then they go to steal the copper cable. I never received training where it comes to electricity, but people who are now doing these things I have seen they are almost like people who received training the way they do the copper cable theft.*

#### **4.2.2.2 Going it alone or casually involved with a friend or help for a group**

The majority of participants indicated that they prefer to execute copper cable theft alone because of the fear of profit sharing and the possibility of being exposed by other copper thieves. It became evident that this crime is sometimes planned and occasionally impromptu.

One participant explained how his spontaneous action to steal copper cable resulted in his arrest:

*I was already in the business of stealing copper cable. I got up early, took the hacksaw and got on the train. The cables were hanging, and I just wanted to cut a piece and go home. Law Enforcement came and caught me with the hacksaw in my hand, and I got arrested.*

Similarly, another participant reacted spontaneously to the opportunity to steal copper cable:

*I saw that there was a quiet place with very little people. It was very easy to take it because the copper cable stuck out of the ground. Nobody gave me information. That was my daily routine. As I walked past there were a lot of people scratching and then they move on. I made sure what was going on and I saw the stuff. People just help themselves and then they move away.*

Another participant explained he was arrested after his first attempt to steal copper cable: *“I never touched the stuff. It was my first time. It had never been a job of mine. I went after other people.”*

In contrast to the above, another participant considered planning a critical factor before committing copper cable theft: *“I planned a specific place. I have to plan because I*

would need a specific tool. It was a hacksaw. I went home and come back with the tools.”

#### **4.2.2.3 At the wrong place at the wrong time**

Ironically, several participants protested their innocence. These participants attribute their arrest as a matter of being at *the wrong place at the wrong time* and thus deny being copper thieves.

*To be honest, I am not a copper thief. I was in the wrong place with someone by accident. I don't know what to do with the copper because I have never stolen copper cable in my life.*

*I am not really a copper thief. I was in the wrong place at the wrong time. Two bags were standing on the sidewalk. While we were looking in the bags the police came. They would not listen to our explanation, and we were arrested.*

*I did not commit the act. I am unemployed. I have my section in Claremont where I watch the cars in the evenings. I am a drug addict. That particular night before the people came to cut the cables, I was smoking my dagga pipe. I did not take notice of the black things that was lying next to me. The people from PRASA came and I was arrested. I was at the wrong place at the wrong time.*

*I did not commit any crime. There were no people with me. I was at the wrong place at the wrong time.*

The third theme from group A explores participant training to commit copper cable theft.

#### **4.2.3 Theme 3: Training for the offence**

This theme explores participant experiences of coaching or guidance on how to execute copper cable theft. The answers to the following question gave rise to this theme:

*Have you received any form of “training” in preparation to execute copper cable theft?*



The purpose of this question was to explore participant knowledge of the methods used to steal copper cable. The sub-themes resulting from Theme 3 are discussed hereunder.

#### **4.2.3.1 No training but learning by observing others or taking a chance**

From the in-depth interviews with sample group A, it became apparent that copper cable thieves receive *on-the-job training* on how to steal copper cable by observing more experienced thieves. Two participants made the following comments:

*I know too little about copper cable theft. I will not be able to know what wire I have to take. I went after other people.*

*I have never been trained. I saw what other people were doing when committing copper cable theft.*

#### **4.2.3.2 Planning for the offence, but not part of a gang**

It appeared from the in-depth interviews that copper cable thieves who are not part of organised crime syndicates do not usually have a pre-planned strategy to commit this crime but act on opportunity and information provided by others. One participant reacted as follows:

*I wouldn't say I chose the site. It is just the site where I sat. It was a particular job where I sat. I knew people cut copper cables in the area of Claremont because they always said go out there, it is a hotspot.*

Another participant said he did not plan to steal copper cable. He maintained that *bad influences* led him to the crime: “*I never planned for copper cable theft, but I was in the company of the wrong people.*”

The fourth theme explores participant motivation and incentives for copper cable theft.

#### **4.2.4 Theme 4: The motivation and incentive to commit copper cable theft**

This theme explored participant insights regarding their most significant consideration when they decided to commit copper cable theft. The answers to the following question gave rise to this theme:

*What was your primary motivation to commit copper cable theft?*

The purpose of this question was to explore participant motivation for the crime. The majority of participants were motivated by money, drugs, and the needs of their families.

A discussion of the sub-themes arising from Theme 4 follows hereunder.

#### **4.2.4.1 Making money from buyers of scrap metal for living expenses**

Participant responses indicate that copper cable theft and the subsequent selling thereof are financially rewarding crimes supported by scrap metal buyers who facilitate and create an easy market for selling. One participant confirmed that copper thieves commit this crime primarily for financial gain because of the high profits gained:

*Most people only do it for the money. The people in my position if they steal copper cables. It doesn't pay hundreds of Rand; we are talking about thousands that people are getting at the scrap yard.*

Another participant echoed the profitability of selling stolen copper, confirming that many perpetrators commit this crime for a living: "... the people are doing it for a living. They do copper cable theft for a living."

#### **4.2.4.2 Satisfying expenses related to drug addiction**

It became evident from the in-depth interviews that many perpetrators are drug abusers and commit this crime to finance their drug abuse. It also became evident that the risk of being electrocuted does not deter these perpetrators. Several participants reacted as follows:

*I smoked drugs. Anyone can do anything to get drugs.*

*I can say now I am under the influence of drugs. Cable copper theft was a quick way to get money, so that is why I did it.*

*By doing copper cable theft, you bring in more money and the more money, the more drugs you can use.*

*If you need money to feed your drug habit, then shock [electrocution] is not a deterrent.*

The fifth theme explores facilitating/reinforcing factors for copper theft.

#### **4.2.5 Theme 5: Facilitating/reinforcing factors for copper theft**

This theme explores participant responses regarding their choice of a targeted site to execute the offence. The answers to the following question gave rise to this theme:

*Did you pre-select a particular site to commit copper cable theft?*

The purpose of this question was to explore why participants select a particular site to steal copper cables.

The sub-themes arising from Theme 5 are discussed hereunder.

##### **4.2.5.1 Burnt trains and load shedding**

Burnt out trains and electricity outages are favourable to copper thieves since the risk of electrocution is low and they present easy targets:

*They don't need any tools because the trains are burnt. They can just take the wire and then pull it loose. There is no live power in the burnt trains.*

*I don't know, but for me, it would be that load shedding is in their favour for copper cable theft.*

##### **4.2.5.2 Corrupt security officers involved in the offence by taking bribes**

It appeared from the in-depth interviews that many security personnel responsible for securing parastatal assets are corrupt and involved in stealing copper cables from their workplace. Participants reacted as follow:

*The security officers sometimes bring the copper to me, especially when there is a strike. Security officers also burned a train in Heideveld. PRASA's people also set fire to their own trains. We take the stolen copper to SA Metal and get the money. Then we take the money to the PRASA security and they would give us half of the money.*

*There was a time the security officers caught me with copper. I made R 500.00 and I gave them R 300.00 and they let me leave with my copper.*

*I will say the police do enough because they arrest people every day, but the security of PRASA they are very corrupt.*

The sixth theme discusses the execution of the alleged offence.

#### **4.2.6 Theme 6: Executing the alleged offence**

This theme explores participant responses to whether copper cables are well protected in South Africa. The answers to the following question gave rise to this theme:

*In your opinion, are copper cables efficiently secured in South Africa?*

The purpose of this question was to explore participant views on the securing and protection of copper cables.

The participants agreed that underground cables are not sufficiently secured to prevent copper cable theft. The execution methods vary according to whether the offender elects to steal an underground cable (*Anaconda*) or an overhead cable (*shiny bright*).

The sub-themes arising from Theme 6 are discussed hereunder.

##### **4.2.6.1 “Anacondas” and “shiny bright”**

Participants had diverse opinions about whether stealing underground cables or overhead cables was preferable. One participant stated that he prefers to steal overhead cables (*shiny bright*) which are lower risk and enable him to make more money without working hard.

However, other participants explained how they go about stealing underground cables and the risks of being electrocuted. Ironically, one participant gave the impression that he did not think he was trespassing when he committed the crime:

*You get the wires underground, that is the thick copper cable that is underground, and we call it the Anaconda, because this cable is now coming out with more than one type of wire inside. A shovel and pickaxe are needed to take it out of the ground. Once it is taken out you have to remove the top layer. To remove all the pieces of plastic, you have to put it in a fire to burn it clean.*

*Someone in the group told me to pull the cable, when I touched it, it pulled me in and then I know nothing. I thought I was dead. There is no notice "Trespassers will be prosecuted." After I burnt the notice was put up.*

#### **4.2.6.2 Cutting overhead cables is less time consuming although more dangerous**

Participants prefer overhead copper cables because less manpower is needed to commit the offence. Many participants preferred stealing overhead cables alone to avoid profit-sharing and lower the time taken to execute the crime.

*I noticed that to steal the copper cable that is in the air, you don't need people to help you, but the copper cable under the ground, you need people to dig a trench. It is much better to cut the copper cable in the air.*

*The copper cable under the ground you have to burn to get it clean while the cable in the air is already clean.*

#### **4.2.6.3 Perceptions of the protection of copper cables: effectiveness of security and protection measures**

Participants agreed that copper cables are not sufficiently protected and not difficult to steal:

*Copper cable is not protected enough. It is very easy to take it. I would say they have to put it deeper into the ground to make it more difficult to steal the copper cable.*

*If it is sufficiently secured, then people will not be able to steal copper cable.*

### 4.3 RESULTS ORIGINATING FROM INTERVIEW WITH SAMPLE GROUP B

Table 4 (Sample Group B) below illustrates the themes and sub-themes resulting from in-depth interviews with members of BACSA (sample group B).

**Table 4 (Sample Group B)**

<b>THEME 1</b>	<b>BACSA participant perceptions of the aims and objectives of the NFMCCC</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 1.1 To prevent and combat the trade in stolen non-ferrous metal by a strategy for intervention and prevention of copper cable theft.</li> <li>- Sub-theme 1.2 Regulate scrap metal dealers.</li> </ul>
<b>THEME 2</b>	<b>Participants perceptions of the NFMCCC achieving its aims and objectives to combat copper cable theft.</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 2.1 Some successes seem to emerge from the statistics on numbers arrested but are also questionable.</li> </ul>
<b>THEME 3</b>	<b>Challenging constraints faced for successful implementation</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 3.1: Lack of human experience.</li> <li>- Sub-theme 3.2: Too many priorities for police investigations with limited resources.</li> <li>- Sub-theme 3.3: Movement of personnel and lack of regular training efforts.</li> <li>- Sub-theme 3.4: The implementation of communication procedures between the SAPS, the NFMCCC and role-players</li> <li>- Sub-theme 3.5: Communication and co-ordination hampered by irregular meetings and/or non-representative attendance.</li> </ul>
<b>THEME 4</b>	<b>The nature of this expected multi-faceted co-operative relationship, interaction and working agreements with stakeholders</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 4.1: Deterioration of the relationship and interaction.</li> <li>- Sub-theme 4.2: The NFMCCC monitoring and evaluating of strategies based on a threat analysis to combat copper cable offences.</li> <li>- Sub-theme 4.2.1: Recordkeeping and stats are done, but a threat analysis does not inform new co-ordinated operation strategy.</li> <li>- Sub-theme 4.2.2: Co-operation in interventions based on crime threat analysis is limited to working with local SAPS or parastatals.</li> <li>- Sub-theme 4.3: Information sharing about convictions not readily available from the NFMCCC.</li> </ul>

<b>THEME 5</b>	<b>More external operational challenges for the NFMCCC for the combating of copper cable theft</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 5.1: Stolen copper cannot be identified because it has been burnt beyond recognition.</li> <li>- Sub-theme 5.2: Involvement of foreign nationals.</li> <li>- Sub-theme 5.3: The entries in the <i>bucket shops</i> (illegal trade).</li> <li>- Sub-theme 5.4: Withdrawal of cases.</li> <li>- Sub-theme 5.5: Copper theft increases when there is load shedding.</li> </ul>
<b>THEME 6</b>	<b>The operationalisation of the NFMCCC mandate in an integrated manner</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 6.1: The functional operation relationship between the NFMCCC and the other stakeholders is hampered by legislation and lack of trained and committed SAPS members for the crime of copper cable theft.</li> </ul>

The researcher presents and discusses responses from sample group B by quoting responses verbatim as received from participants.

The first theme that emerged from in-depth interviews with BACSA participants (sample group B) follows and explores participant perceptions of the aims and objectives of the NFMCCC.

#### **4.3.1 Theme 1: Participants' perceptions of the aims and objectives of the NFMCCC**

This theme presents the participant responses regarding their understanding and knowledge of the aims and objectives of the NFMCCC.

The sub-themes resulting from Theme 1 are discussed below.

##### ***4.3.1.1 To prevent and combat the trade in stolen non-ferrous metals by strategies for intervention and prevention of copper cable theft***

It emerged from the in-depth interviews with BACSA participants that the current strategies to address copper cable theft followed by the NFMCCC are not based on pro-active prevention. One participant stated: "*Ensure the pro-active effective prevention of theft of non-ferrous metals for the Western Cape. I think it is applicable to the whole of South Africa.*" Another participant suggested that legislation addressing

the theft of non-ferrous metals should be communicated to all role-players to enable them to implement improved preventative methods:

*Maximise exposure to all role-players regarding new legislation. If you share that information, parastatals, private securities, and the private industry could have put better measures in place to prevent copper cable theft.*

#### **4.3.1.2 Regulate scrap metal dealers**

Participants regard the implementation and advancement of industry standards for scrap metal dealers and controlling the export market's compliance with standards as a significant aspect of non-ferrous metal crime regulation. Two participants stated:

*To promote ethical standards for the scrap metal dealers.*

*Monitoring the export market to reduce the incidents of non-ferrous metal theft.*

The second theme explores participant perceptions of whether the NFMCCC achieves its aims and objectives.

#### **4.3.2 Theme 2: Participant perceptions of the NFMCCC achieving its aims and objectives to combat copper theft**

This theme presents participant responses regarding whether the NFMCCC achieves its aims and objectives to combat copper cable theft.

Participants unanimously agreed that the NFMCCC does not always achieve its aim and objective to combat copper theft. Participants ascribe this situation due to the lack of clear communication, and the fact that the aims and objectives of the NFMCCC are not aligned to the new Criminal Matters Amendment Act.

A sub-theme arising from Theme 2 is discussed below.



#### **4.3.2.1 Some success seemed to emerge from the statistics on numbers arrested, but accuracy is questioned**

The participants acknowledged that limitations exist in achieving the aims and objectives of the NFMCCC, and therefore they are only partially achieved. One participant reacted as follows: *“Succeed to some extent in our objectives, but we have our constraints with regards to abovementioned issues.”* Another participant agreed that the aims and objectives of the NFMCCC are only achieved to some extent since statistics on copper cable theft remain high. However, this participant cautioned that official SAPS statistics are not reliable because they are not captured correctly:

*Partially yes. In spite of all the measures put in place by the NFMCCC we still see high incidents of copper cable theft, but I have to mention also, I don't think you should rely so much on the statistics of the SAPS because I know some of those are wrongly put down.*

The third theme explores participant perceptions of the challenge/constraints for successful implementation of the aims and objectives of the NFMCCC.

#### **4.3.3 Theme 3: Challenge/constraints faced for successful implementation**

Participant perceptions of challenges and inhibiting factors which affect the NFMCCC explicitly and implicitly mentioned in their contributions on several issues.

The sub-themes arising from Theme 3 are discussed below.

##### **4.3.3.1 Lack of human expertise**

It became apparent that there is a lack of sufficiently trained staff within the NFMCCC. One participant shared his experience as follows:

*Expertise is limited. There is also no specialised investigation unit within that committee, and then as well you need the resources to address/assist people with knowledgeable expertise.*

It further emerged that a function differentiation exists within the NFMCCC. The NFMCCC members nominated to attend NFMCCC meetings do not have any

executive or decision-making powers. Designated members attending these meetings do so on a rotation basis, and resultant communication is affected, and allocated tasks do not come to fruition. One participant's response succinctly summarises this sentiment:

*I am talking about a detective task team to investigate. In the beginning, I think the detectives were into it. It was a function for the detectives [SAPS Detective Division], and then they switched over to VISPOL [SAPS Visible Policing Division], and that is where the problem arose when the detectives' responsibility lack, but the Asset Forfeiture Unit is still involved.*

#### **4.3.3.2 Too many priorities for police investigation and limited resources**

It became apparent during the interviews that the SAPS experiences challenges with prioritising copper cable theft because of other priorities, limited resources, and insufficient expertise. One participant shared the following sentiment:

*The focus is not always just on the copper cable theft, and there are lots of other priorities that they have. I don't think they've got enough people and availability of members is limited. Expertise is limited.*

Echoing the sentiments of his colleague, another participant believed the SAPS has too many other crime priorities to address, resulting in a situation where copper cable theft is under-prioritised:

*There are many other crime-related issues to address in the Western Cape ... So, there are other objectives that on the side they would be understaffed as the rest of the SAPS in the Western Cape. There are other filters also that shift from day to day depends on what is prevalent for that day like gangsterism, taxi violence, domestic violence, gender-based violence and other issues.*

#### **4.3.3.3 Movement of personnel and lack of regular training**

During the interviews, it became apparent that training interventions for members of the NFMCCC are not consistently offered. Participants further raised doubts regarding the capacity and knowledge of the NFMCCC to present training interventions related to non-ferrous metals-related crimes. One participant regarded the lack of training as hampering the aim and objectives of the NFMCCC: *“Movement of the personnel and more regular training has to be done for new members coming in, and it hampers the*

NFMCCC.” Another participant confirmed the lack of frequent training interventions citing that the last training intervention was conducted in 2014: “*The last training that I know of was in 2014. Now the training is not there.*” This participant also questioned the NFMCCC’s ability to present training on the investigation of non-ferrous metal crimes:

*I am not sure if the NFMCCC has got the knowledge to train the members on investigations, maybe on the policing of scrap metal dealers, maybe they have the knowledge on that but not on investigations.*

In addition, one participant emphasised that training on the investigation of non-ferrous metals crimes was facilitated by the Firearms Liquor and Second Hand Goods Control (FLASH) component within the SAPS. However, this participant suggested that training should be re-offered more often to reiterate the relevant principles and procedures.

*Training was done by the FLASH office, but my personal opinion is that we have to revisit that training regularly due to the personnel shuffling in the police service because there are always new members who are responsible for non-ferrous.*

One of the participants suggested that continuous training should be offered and recommended alternative modes of training suitable for the particular level of the target audience:

*The effectiveness is to continuously do training, and I think very effective is that you put it on a CD that they can look at it. The trainees can look at it as they see fit. Also, very important is that you have to speak to trainees on their level. Sometimes I sit at meetings, and the Brigadier in front speaks at a much higher level than your trainee, and it goes over the head.*

#### **4.3.3.4 The implementation of communication procedures between the SAPS, NFMCCC and other role-players**

A lack of information sharing and inefficient communication between the NFMCCC and members on the grass-roots level became apparent during interviews. These shortcomings result in copper cable theft not being pro-actively prevented. One participant reacted as follows:

*The sharing of information within the project is vital, and all role-players know what is happening and sometimes the SAPS specifically the crime intelligence keep information so close to their chest that it doesn't matter if that could have been prevented some copper cable theft.*

Another participant shared his colleague's viewpoint acknowledging that information sharing is often limited to a *need-to-know* basis:

*They have the knowledge, but they do not share all information. Specifically, the information when it is currently under investigation. They don't want to share that information, but the other information on statistics is shared. They do share the suspects, and they do share modus operandi.*

#### **4.3.3.5 Communication and co-ordination hampered by irregular meetings and/or non-representative attendance**

Participants highlighted a need for better communication and co-ordination of processes between the NFMCCC and relevant stakeholders to prevent copper cable theft, especially by syndicates. The need for a unit dedicated to investigating non-ferrous metals-related crimes also became apparent:

*The Provincial monthly meeting and the meeting is at Cluster level has declined somehow with also again the restructuring of the police. Individual parastatals give their information through to the responsible CIG members in the province. Impact of not sharing information will hamper the identifying of syndicates involved. Different role-players have appointed people and investigators to investigate these incidents. Information is gathered by them which are given through to SAPS for further investigation. The main problem again is there is no dedicated task team to investigate.*

Another participant highlighted regular non-attendance of NFMCCC meetings by role-players, which, in turn, hampers decision-making and consequent execution of decisions made:

*The main problem is the level of attendance of the NFMCCC meetings. The initial instruction was that a Brigadier should chair the*

*meeting. Decision makers should attend the monthly NFMCCC meeting from the parastatals which are not always done. Only investigators are sent to give feedback, but if certain decisions are taken people who can implement the decisions that were taken are needed.*

Another participant similarly shares this sentiment: *“The NPA is not always present at meetings, and I think they should definitely be there.”* Furthermore, another participant identified shortcomings in sharing information between the various levels of command resulting in communication distortion: *“CIG is managed at a national level, and the information isn’t regularly channelled to the stakeholders with regard to specific syndicates.”*

The fourth theme explores participant perceptions of the nature of the expected multi-faceted co-operative relationship, interaction and working agreements with stakeholders.

#### **4.3.4 Theme 4: The nature of the expected multi-faceted co-operative relationship, interaction and working agreements with stakeholders**

This theme presents participant responses regarding their experiences in engaging in multi-faceted, co-operative relationships, interaction and working agreements with stakeholders to facilitate, identify and sustain policing strategies to combat copper cable theft.

The sub-themes resulting from Theme 4 are discussed below.

##### ***4.3.4.1 Deterioration of relationships and interactions***

It became evident from interviews that the relationship between the NFMCCC and other relevant role-players is not always sound or trustworthy, especially during information-driven operations. Participants were further of the opinion that the SAPS are not always present. Participants suggested this relationship has deteriorated because of factors, such as budgetary limitations and changes to legislation:

*To a certain extent, the SAPS do engage with stakeholders. It is just a question of some of the stakeholders who must again be brought on board because of the changes that recently took place and*

*budgetary restraints which they had. Telkom lost their investigators with their restructuring, so those are continuous things which have to be addressed.*

Another participant pointed to the fact that new legislation placed limitations on the interaction and working relationship between SAPS and other role-players:

*Some of the legislation now prevents stakeholders to do operations with the police. In the past we used to have an annexure to a warrant when searching premises and the names were included in the application. The stakeholders were mentioned, which is not done anymore due to the legal department of the police, saying that stakeholders cannot participate in their operations anymore. That is one of the causes of deterioration of the working relationship between SAPS and stakeholders.*

#### **4.3.4.2 NFMCCC monitoring and evaluation of strategies based on threat analysis to combat copper cable offences**

Participants agreed that although statistics are available, no real co-operative and co-ordinated intervention strategies were planned based on threat analysis information.

#### **4.3.4.3 Recordkeeping and statistics are done, but a threat analysis does not inform new co-ordinated operational strategies**

One participant believes that FLASH keeps a record of statistics related to non-ferrous metal-related crimes: *“FLASH office in the province keep record of all the operations that take place. It gets reported monthly by the individual policing precincts. They have guidelines of how many visits and operations they have to do monthly.”* Another participant acknowledged the registering of statistics, but questioned the sharing of information and how information is acted upon to inform new co-ordinated operational strategies to address non-ferrous metal-related crimes:

*The only thing that gets done from my perspective and that is what I have picked up in the meetings is just the number of incidents and number of monetary value. That is what they look at, and I don't know if this has got anything to do with their yearly performance, but it is all about numbers and no action. The NFMCCC do not act on crime threat analysis. No information is shared on this.*

#### **4.3.4.4 Co-operation for interventions based on crime threat analysis is limited to working with local SAPS and parastatals**

The participant responses suggested that they prefer to co-operate with the local SAPS and parastatals because they are more supportive than the NFMCCC regarding strategies based on threat analysis:

*Limited actions from stakeholders of NFMCCC. If we do identify crime threat analysis, assistance in acting is very limited from them. We would rather go to the local SAPS for assistance on acting on analysis.*

In agreement, another participant confirmed that parastatals are more supportive of implementing co-operative interventions based on crime threats, though these interventions do not always result in success:

*Specific actions are mostly initiated by parastatals, and I wouldn't say that the parastatals' interventions are not always successful. In some instances, it is, and in some, it is not.*

#### **4.3.4.5 Information sharing about convictions not readily available for the NFMCCC**

Participants highlighted various challenges affecting the conviction of perpetrators. One participant explained as follows:

*As far as the convictions are concerned, there are still a lot of issues. Research proved that there are three factors why cases were withdrawn. The one was that the complainant of the specific parastatal did not want to give evidence. The second factor was that the cases went to court, but because of just a three- or four-line affidavit of the complainant the accused that was arrested had time to explain to the investigation officer in his explanation statement of three or more pages why the incident happened.*

Another participant revealed that although the SAPS have statistics related to pending- and withdrawn cases, this information is not shared with the particular provincial NFMCCC in his province:

*The arrests are sent through to the FLASH office on a monthly basis by each police precinct and there used to be a document of how*

*many postponements for the cases were there and how many withdrawals. That is where we did the research from. That document isn't displayed at the Provincial NFMCCC meeting on a monthly basis.*

The fifth theme explores participant perceptions of external operational challenges to the NFMCCC.

#### **4.3.5 Theme 5: External operational challenges to the NFMCCC for combatting copper cable theft**

The following is a summary of participants' perceptions of additional external challenges that the NFMCCC face to carry out their mandate.

The sub-themes resultant from Theme 5 are discussed below.

##### ***4.3.5.1 Stolen copper cannot be identified because it has been burnt beyond recognition***

One participant explained that evidence in copper cable theft cases is problematic because the outer plastic casing is usually burnt off and thus the owner cannot be identified: *"Once the copper cable has been burnt there is no way that it can be identified and traced to a certain entity."*

##### ***4.3.5.2 Involvement of foreign nationals***

One participant explained that foreign nationals are sometimes used to do dangerous work during copper cable theft. These foreign nationals are abused by drug dealers who accept copper cable as payment for drug purchases. As a result, these copper theft incidences are becoming increasingly violent:

*This is also a great concern. The incidents become more violent of nature as well as the involvement of drug dealers taking in non-nationals for paying for drugs.*

##### ***4.3.5.3 The entries in the bucket shops (informal, illegal trade)***

One participant mentioned the challenge that the illegal trade in copper poses for the policing of crime as follows: *"The bucket shops are in the informal settlements which makes policing very difficult."*



#### **4.3.5.4 Withdrawal of cases**

During the interviews, it became evident that an excessive number of copper theft cases are eventually withdrawn due to ineffective police investigation at the local level instead of detective investigation by senior officials. As a result, the sharing of cross-precinct crime information does not take place. One participant summarised this phenomenon as follows:

*Withdrawal of cases has a high volume in the province due to the detectives that aren't involved too much in the investigation and that cases are investigated at local police precinct. Although it is the same syndicate involved, the one police precinct doesn't know what the other is doing.*

#### **4.3.5.5 Copper theft increases when there is load shedding**

Participants agree that load shedding enables criminals to commit copper cable theft by lowering the risk of electrocution. One participant reacted as follows:

*Definitely copper cable theft is going to increase, and load shedding has an enormous effect. With syndicates it won't have an effect because they just continue. Your 'bread and butter thieves' however will operate when it is dark, and they can't be noticed.*

The sixth theme explores participant perceptions of the operationalisation of the NFMCCC in an integrated manner.

#### **4.3.6 Theme 6: The operationalisation of the NFMCCC in an integrated manner**

This theme explores participant responses regarding whether the mandate of the NFMCCC is operationalised in an integrated manner to effectively address copper cable theft.

It emerged that participants are optimistic about the existence of the NFMCCC; however, the Forum's functional operation and co-ordination have several challenges that relate to challenges in Theme 3, as discussed earlier.

The sub-themes resultant from Theme 6 are discussed below.

**4.3.6.1 The functional operational relationship between the NFMCCC and the other stakeholders is hampered by legislation and lack of trained and committed SAPS members**

It became apparent that parastatals, who lack powers to arrest, find themselves in a difficult position during operations co-ordinated by the NFMCCC. The SAPS are not always present, and there is an apparent lack of training at station level regarding the mandates and legislation:

*The mandate is operationalised in an integrated manner apart from legislation which prevents parastatals accompanying police members when they do operations.*

It further became evident that the NFMCCC and other stakeholders' working relationships are not optimal and should be re-evaluated. In addition, it appears that the SAPS do not have dedicated members to address non-ferrous metals-related crimes:

*In my opinion, the whole project should be revisited with everybody involved to keep them involved. Get SAPS to have committed members to do the non-ferrous project and do not shift personnel. Do not make it an over and above job at the station for the dedicated non-ferrous member.*

The lack of training by the NFMCCC once again emerged. One participant stressed the fact that certain SAPS members are not familiar with procedures to follow in cases of non-ferrous metals-related crimes:

*The NFMCCC was supposed to provide training to police stations and police offices on the new Act. That was in 2014. They gave training but even last year when we got to a police station they don't even know what case to open. They don't even know the criminal code on the CAS-system.*

Sample group B (who initially implemented the NFMCCC) demonstrated the need for a benchmark to serve as best practice and the need to return to the basics. They also suggest that the current NFMCCC should follow best practices and that they should

look to the successes of the previous NFTCC to gain a competitive edge in the fight against copper theft.

**4.4 RESULTS ORIGINATING FROM INTERVIEW WITH SAMPLE GROUP C**

Table 4 (Sample Group C) below illustrates the themes and sub-themes resulting from in-depth interviews with CPI participants (sample group C).

**Table 4 (Sample Group C)**

<b>THEME 1</b>	<b>CPI participant perceptions of the aims and objectives of the NFMCCC</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 1.1: Combined approach by the SAPS and relevant private enterprises to combat copper cable theft.</li> </ul>
<b>THEME 2</b>	<b>Participant perceptions of the NFMCCC achieving its aims and objectives to combat copper cable theft</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 2.1: Outspokenly negative about successes.</li> <li>- Sub-theme 2.2: Partially successful.</li> </ul>
<b>THEME 3</b>	<b>Engagement in multi-faceted co-operation relationship, interaction and working agreements with stakeholders to facilitate, identifying and sustain police strategies to combat copper cable theft</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 3.1: Lack of structured result-driven working agreements with time frames.</li> <li>- Sub-theme 3.2: Lack of open communication and trusting relationship.</li> </ul>

THEME 4	<b>The nature of the strategies planned for achieving the goal</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 4.1: Lack of clear planned strategies that are effectively managed.</li> <li>- Sub-theme 4.2: The strategies are not applied properly because of possible corruption or incompetency.</li> <li>- Sub-theme 4.3: Perception of strategies monitored, evaluated, and adapted based on the up-to-date information and/or from a crime threat analysis to determine the copper cable crime trends.</li> <li>- Sub-theme 4.3.1: Overall negative perceptions of strategies adapted based on evaluation.</li> </ul>
THEME 5	<b>Effective strategy implies knowledge of the crime and product and legal matter</b>
THEME 6	<b>Participants perception about the NFMCCC continuously developed and implements strategies to address identified shortcomings or to improve on existing strategies</b>
THEME 7	<b>The need for co-ordination of integrated strategies</b>
THEME 8	<b>Operational relationship between the NFMCCC and other stakeholders</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 8.1: Experience of passiveness or ineffectiveness.</li> <li>- Sub-theme 8.2: Positive experience of operational relationships.</li> </ul>

<b>THEME 9</b>	<b>Factors hindering the successful implementation of policing strategies implemented by the NFMCCC to address copper cable theft, challenge internal and external</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 9.1: Human resource issues availability of knowledgeable and dedicated SAPS members.</li> <li>- Sub-theme 9.2: The need for training of SAPS members</li> <li>- Sub-theme 9.3: Perceptions that communication and information sharing is an indispensable aspect for effective operations.</li> <li>- Sub-theme 9.3.1: Communication information sharing insufficient and should be included intelligence and not just stats.</li> <li>- Sub-theme 9.3.2: Sharing is done, but it is selective sharing of information.</li> <li>- Sub-theme 9.3.3: No sharing of information on cases (catastrophic).</li> <li>- Sub-theme 9.4: Link between SAPS and NFMCCC</li> <li>- Sub-theme 9.4.1: A link exists but influenced by lack of trust and feelings of superiority by SAPS.</li> </ul>
<b>THEME 10</b>	<b>The NFMCCC functions of monitoring and co-ordination crime/combating operations in an integrated manner.</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 10.1: Perceptions of no or some co-ordination but no integrated operations.</li> </ul>
<b>THEME 11</b>	<b>Summary of NFMCCC efficiency and functionality on copper cable theft</b>

The researcher presents and discusses sample group C's responses by quoting responses verbatim as received from participants.

#### **4.4.1 Theme 1: CPI participants' perceptions of the aims and objectives of the NFMCCC**

The participants made a strong statement that the aims and objectives of the NFMCCC are not upheld due to the lack of proper communication and training which should be integrated with the new laws on copper cable theft in South Africa.

The sub-themes resulting from Theme 1 are discussed below.

#### **4.4.1.1 Combined approach by SAPS and relevant private enterprises to combat copper cable theft**

The participants' responses indicate that co-ordination of approaches by the NFMCCC is not always effective, particularly during critical stages and major operations. It also emerged that parastatals are left without support or co-ordination by the SAPS due to internal power struggles. The following responses from participants summarise their views:

*To get various role-players, South African Police Service, all SOE's (State Owned Entities), all the people that are implicated by essential infrastructure or copper cable theft together in order to get a solution to address the crux.*

*To combat and stop the theft of copper cable as well as the export which is now not allowed to be leaving the country.*

*Main focus and aim were to get people together to address copper cable theft and to address it in an organised manner.*

*History of the success of the previous co-ordination committee and also highlighted the information sharing and dedicated leaders.*

The second theme explores participant perceptions of the NFMCCC, achieving its aims and objectives to combat copper cable theft.

#### **4.4.2 Theme 2: Participant perceptions of the NFMCCC achieving its aims and objectives to combat copper cable theft**

Contributions indicate that participants have mixed feelings about the NFMCCC attaining their goal and objectives, ranging from a clear *no* to being uncertain and/or acknowledging only partial success.

The sub-themes resulting from Theme 2 are discussed below.

#### **4.4.2.1 Outspokenly negative about success**

It emerged from the in-depth interviews with CPI participants that the NFMCCC does not achieve its aims and objectives to combat copper cable theft. It appears that NFMCCC meetings only focus on non-ferrous metal crime statistics; however, no action is taken to address this crime collectively:

*No. I would say these meetings are there for statistic related objectives currently. In these meetings crime trends are discussed or crime statistics, but there is no tasking towards the individuals on these meetings in order to get results.*

Another participant echoed similar sentiments and stated:

*No. It is evident that role-players keep information to themselves. Meetings have become a statistical session and crime is not being addressed.*

In agreement with his colleagues, another participant suggested that all NFMCCC role-players should reach consensus on the aims and objectives of the NFMCCC to combat copper cable theft efficiently:

*All the entities in our country, Public Service entities plus private, plus the police have to come to a table to talk the same thing and that vision laid down must be to set goals and goals should be achieved at the end. The main thing about the performances has to be feedback.*

#### **4.4.2.2 Partially successful**

It became clear from the in-depth interviews with CPI participants that they perceive the NFMCCC as partially successful in achieving its aims and objectives to combat copper cable theft. Participants ascribed this partial success because of the NFMCCC focusing on 'easier' targets and not providing expert management.

One participant regarded the previous forum, namely the NFTCC, to have achieved its aims and objectives. However, this participant has doubts about the current NFMCCC achieving its aims and objectives in terms of copper cable theft:

*I think when it was still the NFTCC, we achieved more of our goals. I am not quite sure if the NFMCCC is really achieving their goals at this stage of the game.*

Another participant was sceptical about the NFMCCC achieving its aims and objectives explaining that it focuses primarily on petty criminals instead of organised syndicates: “*We are hitting the easy targets, soft targets, the small ones and the big guys are not scared.*” In agreement, another participant echoed a similar opinion:

*I think they feel that there is a certain amount of success, but if you go down to the ground level there is still a lot to be learned and a lot of changes to be made to certain things as well as goals to be set when it comes to what is expected from the top levels of the structure down to the bottom. When it comes to check the box, you know the stations are doing inspections, but what is happening from the inspections, I don't think much is actually going past that.*

One participant was of the view that the SAPS do not use external or internal expertise optimally:

*All the role-players are there, but they are not optimally making use of the expertise of the other companies or the components in the SAPS that are involved. Currently, it is the custodian of Vispol Policing [SAPS Visible Policing Division] and most of the efforts are coming from Vispol Policing.*

Another participant echoed the sentiments of his colleagues, stating:

*In my opinion they [NFMCCC] are about 60% to 70% effective. There is room for improvement. The current efficiency and functionality can better by getting more people involved and getting the inputs from the private sector.*



The third theme explores participant perceptions of engagement in multi-faceted co-operative relationships, interaction and working agreements with stakeholders to facilitate, identify and sustain policing strategies to combat copper cable theft.

#### **4.4.3 Theme 3: Engagement in multi-faceted co-operative relationships, interaction and working agreements with stakeholders to facilitate, identify and sustain policing strategies to combat copper cable theft**

From the feedback received from CPI participants, the existing NFMCCC structure is primarily used for discussion and interaction, but they doubt that planning and implementation are done according to clear aims and objectives.

The sub-themes from Theme 3 are discussed below.

##### ***4.4.3.1 Lack of structured, results-driven working agreements with time frames***

The participants made it clear that there is an apparent lack of structured, results-driven working agreements that contain fixed timeframes. One participant reacted as follows:

*There are no clear objectives. The only objectives currently are to get all these people [NFMCCC] together and state their problems, and there is where it stops. There are no action plans and tasks to actually address the problems and get results. In other words, it is not result-driven. The objectives are only to state statistics.*

Another participant similarly questioned the effectiveness of the NFMCCC:

*If they were effective, then there would be far less problems than what is experienced at the moment with copper cable theft. It won't be gone but the problem is it is just on the increase.*

One participant acknowledged that the NFMCCC performs operations resulting in successes; however, he believes that more successes should be achieved given the structure of the NFMCCC:

*The framework is there, and it does happen. We have operations, we have meetings, people share the information, they run operations but with the operations there are successes, but if you*

*look at the whole structure you would think that there would be much more successes.*

#### **4.4.3.2 Lack of open communication and trusting relationships**

Some participants were outspoken about the lack of trusting relationships, interaction, and co-ordinated co-operation between the NFMCCC and other role-players. The lack of open communication, non-sharing of information, and power struggles between role-players emerged as inhibiting factors. One participant reacted as follows: “*You will not share information with some guys because there is a power play, and he has an attitude.*” In agreement, another participant confirmed the internal factors inhibiting the NFMCCC from achieving its aim and objectives as follows:

*The goal is not reached at all because of the stuff being put on the table. They guys don't get along. Everyone is talking in the air. There are no goals set at an NFMCCC meeting and feedback is given at the next meeting. The specialised guys from the police, the LAB [SAPS Forensic Science Laboratory (FSL)], the forensics, they all have to form a quorum around a table, and everyone has to make an input.*

One participant posited that relationships amongst NFMCCC role-players do exist; however, these relationships could be strengthened in order to utilise all available knowledge and expertise to its fullest potential:

*A lot more can be done to establish and maintain relationships amongst all the role-players. I would not say they are utilised to their full capacity and the relationships are there, but much more can be done to make use of all the expertise at the Forum.*

Another participant identified poor communication and interaction between NFMCCC role-players and suggested additional communication methods and interaction using technology. According to this participant, communication and interaction are limited to NFMCCC meetings. In addition, communication, and interaction between NFMCCC role-players and the SAPS has deteriorated as a result of experienced SAPS members having been transferred to other units:

*There are many ways to do these interactions. Many of the things are done via WhatsApp, email, and text messages. There is*

*personal liaison between each other at meetings. It is done on a basis of that the institutions and the stakeholders know of each other and the police. Previously you had a Copper Cable Theft Unit at the police and then you liaised with the person who knew his work, but when the stuff changed to Visible Policing you no longer have the same connections. A lot of contacts or links that were in the police got lost because the guys were moved to other paced which had an impact.*

Moreover, another participant questioned communication and interaction as follows: “To be honest, I don’t think they do it as it is supposed to be done.”

The fourth theme explores participant perceptions of the nature of the strategies planned for achieving the goal.

#### **4.4.4 Theme 4: The nature of planned strategies for achieving the goal**

Some participants believed that there are no clear strategies by the NFMCCC to address copper cable theft, although some believe that there are strategies put in place but are doubtful whether those strategies are being managed effectively.

The sub-themes resultant from Theme 4 are discussed below.

##### ***4.4.4.1 Lack of clearly planned strategies that are effectively managed***

One participant believed that the NFMCCC does not have a transparent strategy to address non-ferrous metal-related crimes. This participant suggested a governing body, training interventions to upskill inexperienced members as well as intelligence-driven strategies:

*There is no clear strategy. The strategy, I would say is firstly to get all the relevant people together to get a solution in order to address non-ferrous related crimes. To get a governing body to regulate the Second-hands Goods dealers. Training should be given to people that don’t have the knowledge. I would also say that the strategy should have a centralised point where everything related to copper cable theft or essential infrastructure is centralised, whether it is intelligence or informants.*

Another participant posited that the responsibility of the NFMCCC is to facilitate information gathering and sharing among all role-players of the NFMCCC with the emphasis on ensuring that available information is sufficiently acted on. This participant responded as follows:

*The NFMCCC is there to oversee all the different members and to get all the information together. Their strategy should be to concentrate on specifics and to act on it appropriately to eventually get to the common goal.*

One participant was confident that the NFMCCC has strategies in place; however, he suggested that strategies should be managed effectively:

*I do understand the strategies, and I think the strategies are in place, but you can have a lot of strategies that you still have to manage effectively.*

#### **4.4.4.2 The strategies are not applied properly because of possible corruption or incompetence**

One participant suggested that SAPS members responsible for enforcing the Second-Hand Goods Control Act, 6 of 2009 should be rotated since they become complacent and merely strive to meet site inspection targets:

*The DSO's [Designated Second-Hand Goods Control Officers] have been doing the job for a long time... I think the lines are blurred and I don't think guys should do that job for too long, especially in the same area. They should be moved around. They are under huge pressure to meet targets, so they don't really do scrap dealers. They do all second-hand goods, but I don't think they are actually getting around to it."*

Another participant cautioned against corrupt activities among those SAPS members who are responsible for enforcing the Second-Hand Goods Control Act 6 of 2009 suggesting that relationships between officers and second-hand dealers become too friendly creating an environment for corruption:

*I don't think it is strategies not being applied to. I don't believe the same policeman should be in charge with such a big operation and I don't think that it is healthy. I can't say all policemen are corrupt,*

*but the relationship becomes too friendly, and I have seen corruption.*

One participant viewed the application of strategies by the NFMCCC from a legislative perspective. This participant suggested that the new legislation presents challenges for the SAPS and NPA.

*We are aware of the basics, but we are struggling to actually get the DSO's as well as the prosecutors to implement the new laws. It has definitely had an impact on copper cable theft. Since the day, the new Act has been put in place there has definitely been a change from the police side. I have been to police stations and to courts where they, for the last year or two, are still not aware of the new Act even though their senior public prosecutors have said they have informed their prosecutors. The DSO's said they know about something like that. It is really not taken very seriously.*

#### **4.4.4.3 Perceptions of strategies monitored, evaluated, and adapted based on up-to-date information and/or from a crime threat analysis to determine copper cable crime trends**

Participants illustrated that they do not clearly understand what happens to crime statistics and how they are analysed and implemented. Participants were further concerned about the timeous availability of information, which is not always available for information-driven operations.

#### **4.4.4.4 Overall negative perceptions of strategies adopted based on evaluation**

Participants were generally negative about strategies based on evaluations which are not adequately planned or communicated effectively. One participant described the NFMCCC meeting as a “*statistical nightmare*” and had reservations as to whether the NFMCCC sufficiently analyses crime statistics on copper cable theft to ascertain the impact of implemented strategies:

*It could be that it is monitored, but I am not too sure if they evaluate it to see the impact, because if they would have done something else or considered something else to see if it is not going to have a better, more positive effect. They do give feedback on meetings*

*regarding incidents of copper cable theft, but that has really just become a statistical nightmare.*

In agreement, another participant stated:

*What I have picked up from the meetings is just a number of incidents, number of monetary value. That is what they look at, and I don't know if that has got anything to do with their yearly performance but is all about numbers and no action.*

Another participant suggested that the NFMCCC does not provide sufficient guidelines to evaluate the impact of implemented strategies which results in aimless solution-seeking:

*If there are desired guidelines, you can certainly do the evaluation as desired, but if you do not have proper guidelines to do certain evaluations and or have the knowledge to do certain evaluations, then it is a matter of you grabbing around in the dark.*

Without hesitation, one participant cast doubt on some police officers' knowledge and ability to conduct threat analysis and further questioned their ability to implement strategies without any knowledge of such strategies. This participant also emphasised the significance of support and expertise provided by specialised units:

*You must at least first know what a threat analysis is before you can start speaking. You must know what analysis is and what threat analysis is. Some police officers do not have a working clue what the word means. How can you implement something that you do not understand yourself and that is where the specialised units come in to give guidelines to be able to understand it?*

Another participant confirmed that intelligence-driven operations are conducted, acknowledging that these kinds of operations conducted by the SAPS impact on copper cable theft. This participant further stressed the importance of timely crime information being available in order to make an impact:

*Yes and no. If we are able to act on information fast enough and the threats quickly enough, we can make an impact. A lot of it is intelligence driven and without that we wouldn't have actually made*

*much of an impact. Without the police we wouldn't have been able to do anything because they have certain capabilities that we don't have.*

Interestingly, another participant believes that the SAPS is manipulating crime statistics, thus creating a skewed picture of the reality:

*They are manipulating the statistics. We are going to present the statistics at the Forum in our province and we will request the police to investigate it so that we set an example. We will stop the tendency because if they continue, then they don't see the real crime picture because it is not registered on CAS and nobody knows about these incidents.*

The fifth theme explores participant perceptions of an effective strategy, which implies knowledge of the crime, product, and legal matters.

#### **4.4.5 Theme 5: Effective strategy implies knowledge of crime and product and legal matters**

The participants argued an apparent lack of forensic investigators with the necessary knowledge of copper cable theft investigations. One participant reacted as follows: *“It just comes back to that they are not effective. They don't have the skills maybe or they don't have the knowledge.”*

Another participant suggested that a dedicated SAPS unit should be established to address copper cable theft. In addition, this participant recognised a lack of linking cases as a shortcoming:

*You should have detectives' task specifically to deal with copper cable theft. Where the weakness comes in is where you have three different detectives dealing with different cases and they don't even realise that it is linked. They need to be specialised in copper cable theft.*

One participant regarded private security's restricted mandate as an obstacle to preventing copper cable theft. Moreover, this participant described co-operation between role-players as desirable:

*By law, we are not allowed certain things, so we are then more just as eyes and ears, but our biggest issue is against the DSO's are just doing the bare minimum. We catch them in the act but through police negligence or non-compliance the man is released on bail and that is it. These cases should be handled under the new Act 18 of 2015. It is an essential network. There is co-operation from time to time but not as desired.*

Another participant viewed efficient gathering and management of crime information as crucial and also identified ill-informed role-players as a shortcoming:

*On paper and on record is 100% right to be successful, but your problem is that your role-players starting at the SAPS and your other institutions, the intelligence at the stage that the information from anywhere comes in and if it is done right, it will be successful. If the information is not dealt with correctly it will not be successful and then we come again. Many people unfortunately everywhere at the institutions and at the police are ignorant of the law.*

One participant suggested the following strategy to address copper cable theft:

*The strategy is to address our trade like scrap sites. Then identifying who sells it to the guys. Who sells to the scrap metal dealer and who does the scrap metal dealer sells to? Will he export it or will he deliver it to a local refiner. The moment that the stolen copper cable goes to the refinery the chances to identify it is very difficult.*

The following participant regards the fact that the NFMCCC's mandate is not restricted to copper theft, but includes liquor and firearms-related offences, as problematic:

*In my opinion the NFMCCC is not just concentrating on copper cable theft. There are liquor and firearms. There are other priorities as well, so once again we need one unit only concentrating on copper cable theft because it has become such a major problem.*

The sixth theme explores participant perceptions that the NFMCCC continuously develops and implements strategies to address identified shortcomings or improve existing strategies.



#### 4.4.6 Theme 6: Participant perceptions of the NFMCCC continuously developing and implementing strategies to address identified shortcomings or to improve on existing strategies

Participants expressed an overall lack of leadership regarding the NFMCCC's adoption/adaption of strategies to address identified shortcomings or improve existing strategies. Answers ranged from *to some extent* to *unwillingness*. The following excerpts substantiate this conclusion:

*To some extent, in the Western Cape, I will say to improve it, I will say yes. I constantly or not constantly in some instances, hear that there will be training sessions, specific to the DSO's in order for them to understand the legislation better. There is not done enough in order to make this committee more effective.*

*I think it needs to be followed more closely, and the NFMCCC should continuously develop and implement strategies to address identified shortcomings or to improve existing strategies. I am not 100% sure if they are up the task at this point in time".*

*"Chairperson's unwillingness or the passionate lack to take the thing further and it's not that important to him because he makes more arrests with cash in transit. Everyone doesn't see the big advocate, SA Metals and its untouchable.*

*Criminals know as well as the scrap dealers that it is more a joke than anything else. We were very excited when the new Law came into place with the 15-year minimum sentence, but we had cases now that had gone through the process where we testified, and they had been given 50- and 10-years' sentences. You must understand that they will be given early release in a few years' time. We arrested a suspect in 2017, April and the following year in April he was arrested again on the same charge. The scrap dealers know that the copper cable that they buy is stolen and that they hide it. They have places where they will stash it or they will buy it off books at different premises. So definitely it needs to be ramped up quite considerably to actually scare them to say no I am not buying it.*

*In the past at the Provincial Forum, mostly at the beginning of a new year, we would sit down and will have a strategic session. We will look at what was our shortcomings for the past year. What did we achieve and what didn't we achieve and what do we want to reach this coming new year? We set certain goals for ourselves and what we can put on the table to address the threats more effectively. Currently, that is not happening. There are no strategic sessions currently at the Provincial Forum that I am aware of. They just go from here to there, and they don't set new goals and see what didn't work. They don't evaluate their strategies and the work that has been done maybe on a yearly basis, what were all the successes to what they focused on.*

The seventh theme explores participant perceptions of the need for co-ordination of integrated strategy.

#### **4.4.7 Theme 7: The need for co-ordination of integrated strategies**

Participants acknowledged that sharing information at NFMCCC meetings is primarily restricted to non-ferrous metals-related statistics, but not the development of an integrated strategy that is needed most. The following responses were raised:

*Mostly at these meetings statistics are discussed. I don't even think they [NFMCCC] analyse where they see a decrease or an increase. There is no pro-action in analysing the crime to see what type of criminals we are dealing with. What is the root cause and where will the crime move to? If I can speak related to syndicates, one policing area will have a problem and the NFMCCC will address the specific policing area tasking them with things like disruptive operations, etc. They don't even know with what type of criminal they are dealing with.*

*You attend a two-hour meeting, and when you walk out, you can tick off your box that you attended the NFMCCC meeting. You only have the minutes of the previous meeting, the agenda, and the attendance list in your file. Next month you will talk about exactly the*

*same thing. SA Metals is on the table again, but no one is coming forward with anything because no committee has been created within the NFMCCC to address the core, the centre point. We have been talking about the same thing month after month for years because there is no management line.*

*Definitely not an integrated strategy. Each individual will work on his own objectives, his own problems, and we will come together and discuss our own problems, our own objectives. There is not active integration between the units on a daily basis. People must be in one building, sitting together and working daily on achieving results. There must be clear management, one manager managing this specific crime.*

*A lot more can be done to co-ordinate the operations. Clusters should come back on a monthly basis and give feedback on what operations they did for the past month and what their successes were. You get 80% of the clusters don't attend the meeting, and then 20% will say they didn't have chance to conduct any operations or they just give feedback that they just visited five or six scrap yards. The intelligence driven operations conducted are minimal.*

*The co-ordination of operations does take place, but on the private side in the sense that the private people are dependent on the police for direction. The direction like Peace Officers or something like that will actually make it a lot easier for them to combat copper cable theft as well.*

The eighth theme explores participant perceptions of the operational relationships between the NFMCCC and other stakeholders.

#### **4.4.8 Theme 8: Operational relationships between the NFMCCC and other stakeholders**

From discussions with participants, it appears that the functional relationships between the NFMCCC and other stakeholders were *passive, not so good or effective to a*

*certain extent*, depending on the local region or the specific provincial NFMCCC representative.

The sub-themes resultant from Theme 8 are discussed below.

#### **4.4.8.1 Experiences of passiveness or ineffectiveness**

Participants thought, specifically in the Community Service Centre (CSC), that functional SAPS members are not familiar with the Criminal Matters Amendment Act on copper cable theft which leads to a power play between the SAPS and the parastatals leading to remarks from SAPS members, for example, “*Do you want to learn (sic) me how to do my job?*”

Participants further voiced their opinions relating to the effectiveness of the NFMCCC in the following manner:

*I would say it is a really passive relationship. These individuals come together once a month only to get problems and not solutions. A lot of these individuals even make an effort to in between the meeting get together even if it is not all the people.*

*I will say it is not effective at this stage. More can be done to get the involvement and commitment of everybody on the Forum. From SAPS side, the Prosecutors, I must say the private sector are there. They know what the current situation is on copper cable theft in the country. They want to address it but you cannot with the limited powers that you have in the private sector. The private sector cannot do anything without the assistance of SAPS. There are so many meetings held and operations where the institutions and the police are involved but the big problem is that the operations that are done monthly are being done by the same people and the question is if the person does not know what to look for, how will he know what is really going on.*

*Some members are not prepared to listen to your expertise or consider any input from your side. Some members do not have enough trust in stakeholders to share information and therefore, does not work to a common goal. Some members will not speak to*

*you or will not allow you to attend a meeting if you cannot prove to him that you are in possession of a [Private Security industry Regulatory Authority] PSIRA certificate. This after he knows your trade for years already.*

*There are a lot of guys out there that do try their utmost best to do a proper job, but then there are some of the investigators that will tell you “don’t come and tell me how to do my job”. It is a matter of we want to assist them to share knowledge and to coach them over the shoulder on the scene. If I can put it – the attitude stinks.*

#### **4.4.8.2 Positive experiences of operational relationships**

Participants articulated their positive experiences about working relationships between role-players as follows:

*From our level that we dealt with at the station level, our main one was in the Midlands in Meyersburg, and we felt that they were very helpful to a certain point. You know they would instruct the various Station Commanders to assist or whatever that would be, so from that side they are really helpful.*

*People want to get involved. People want it to succeed. At that level, if you go to Regional meetings and Provincial meetings, yes everyone is there, and people that actually come to that meeting are committed people, and they have their inputs, they share. The relationship is good.*

*They definitely do. At the meetings, I have been at they usually try and involve all entities. Unfortunately when you get SOE’s where some of the people that are appointed there are not interested. The invitations go out to all the various entities, but they are usually not there. It is usually more your private sector that are involved and that are there to drive the side of Non-Ferrous (copper cable theft).*

*According to me, the operational relationship is effective. The stakeholders take charge of the operations as they play a big role in the investigation. Most of the information comes from the community and are relayed to the police officials who will follow it up so that the*

*right tasks can be identified, and the operations can be executed. The police depend a lot on the entities like Eskom or Telkom and the information of the private investigators to be successful. Most of the time, they are successful where the stakeholders are involved, and the evidences are handed in the right way at the police stations. Evidence are properly marked, and the identifying of stolen property gets done before the suspect goes to Court.*

*It is effective to a certain extent, in my opinion. At least you know who to phone. The minute the Forum is there, we meet and greet the various role-players. You can pick up the phone, you know who you can deal with and who the police officials are. There are some information sharing, and in that case, it is to a certain extent effective in that regard.*

The ninth resultant theme explores participant perceptions of factors hindering the successful implementation of policing strategies by the NFMCCC to address copper cable theft.

#### **4.4.9 Theme 9: Factors hindering the successful implementation of policing strategies by the NFMCCC to address copper cable theft**

The sub-themes resultant from Theme 9 are discussed below.

##### **4.4.9.1 Human resource issues – availability of knowledgeable and dedicated SAPS members**

Participants identified an array of shortcomings in terms of human resources available to address copper cable theft efficiently. These shortcomings included the lack of trained and committed SAPS members, which negatively influences information-driven operations to combat copper cable theft in South Africa. Power struggles between certain role-players were also identified as problematic:

*The DSO's are not trained correctly. I have seen people outside the police that have more experience related to the Legislation on the Second-hand Goods Act, so I would say that the correct people are not in the correct positions and this hinder the strategies. In order*

*to address copper cable theft, it must be specialised. Resources, physically as well as human resources, are major problems. There are definitely not enough dedicated people assigned to the problem, and as stated previously, it is a great concern. Forensic specialists are also a problem. Communication is a problem.*

*We used one of the members of DPCI for approximately three years, and he got an understanding of this whole syndicate in the Western Cape, and then he was transferred to the Gang Unit. Where do we go now? Who do we speak to?*

*My experience is that we are seen as a threat. They do not want to work with us. It is said that we have taken their jobs and that we are receiving larger salaries.*

*Manpower is our biggest shortfall in the country. If you need to do an operation on a day and you have one or two police members because they are either on leave or busy with other operations. You can go with the police, but you are not allowed to go and do x, y and z. We might do it, but if you come to the Courts and you have a clever attorney, he might know the Law better than the State Prosecutor and say but what were you doing there without the police, and he can give the case withdrawn.*

*Lack of commitment in the Police. These policemen shouldn't be detectives. The prosecutors might not even need to be prosecutors. They are degreed people, but there is a lack of commitment and obviously to be fair over and above that they are all overworked. The number of these guys at stations, especially at smaller stations are not enough as they are target driven, so their visits at the scrap dealers become a tick in the box.*

*What hinders this whole thing is that your DSO or your designated people vary at the police stations. There are very few police stations where you get the same person that works there. If a person is now picking up trouble in places, he's then put at the DSO to handle the Second-Hand goods in the areas.*

#### **4.4.9.2 The need for training of SAPS members**

A significant outcry by participants concerned the training of relevant role-players and was a common theme:

*Training is also a big problem because it seems as if they are not familiar with the provisions of the Amendment Act.*

*It is a case of training, whether it is a case of know and so on, I think there is a very big shortcoming on the part of the Police to be more successful in the specific task. If you are not familiar with let's say a Law or a Regulation and/or whatever it may be, it's application will then not be to your liking and due to the nature of the case at this stage, the Police are learning very strongly on the private sector, and it's all the other elements such as the Eskom's, the Telkom's, the Mines and so on, relying very heavily on them to basically do their job well.*

*We've actually been invited and attended some of their training. Really good in-depth training. Ultimately there is a problem. There are some police who didn't attend. It should be a requirement. Training does happen.*

*Long time ago in our Forum, we conducted training sessions to the Prosecutors with involvement from SAPS and also from the industry, experienced guys that know the materials of Eskom, Telkom, for example, Transnet. We developed a training manual at that stage that we presented also to the Prosecutors, and at that time it assisted us a lot, but I think with the new Act on the books they must look for similiar training.*

One participant prioritised the need for specialised detectives with the necessary expertise to serve on the NFMCCC:

*Most important I would say is specialists, definitely specialist within the areas. Whether it is from the parastatals, whether it is from DPCI*



*in the detectives. I am not of the opinion that the people with the relevant [expertise] are on those committees.*

#### **4.4.9.3 Perceptions that communication/information-sharing is an indispensable aspect for effective operations**

Participants made it clear that there is a lack of proper communication before, during and after information-driven operations concerning copper theft. Although information sharing is a primary objective for co-operation, and the NFMCCC provides the opportunity, there are concerns that information sharing does not go beyond taking note of crime statistics. Further, members hesitate to share crucial information about operations or knowledge about the crime. Others are more positive about the opportunity for information-sharing, but it is clear that what is shared is insufficient at an operational level.

#### **4.4.9.4 Communication/information is shared though insufficient and should include intelligence and not only statistics**

It appeared that crime information and data is poorly communicated, and there is mistrust between the relevant role-players. Thus effective and efficient information-driven operations to combat copper cable theft in South Africa cannot be planned. The following responses from participants capture participant views:

*Information are shared on a need to know basis. I think one of the most important things are to concentrate on intelligence. A lot of these things are that we must have a scrap dealer visit within this month or we must have a disruptive operation in this month. There is not enough gathering on information in order to strategise rather than to waste time to visit a person without any information.*

*Definitely successful with the guys that come to the meetings because they give inputs where they are struggling. We need to do this with monthly reports or weekly reports as your client requests, and then you are tied to do decent work. Information is not longer coming out at the right places. I want to go so far to say statistics are done on paper to show the media, but from there, nothing happens to the stats.*

*They [NFMCCC] provide us with stats for their areas on copper cable theft at the meetings we go to, but when it comes to actual intelligence, I don't think they have the manpower or the capabilities to actually target copper cable theft and on-ferrous. I don't think they take it seriously as for example, murder and robbery.*

*People will share information between one another, but they won't share 100%, because your problem with the information today is you have many guys in security, police officers and everywhere there is corruption, and there is some information that you really cant shared on such a Forum because you don't know who awaits you if you come back.*

*A lot of information are shared, but I will not say it is effective. I would not say it is sufficient, but in certain areas, they need more meetings.*

#### **4.4.9.5 Selective sharing of crime information**

Participants posited a lack of, and in some instances, selected sharing of crime information, between role-players of the NFMCCC. These participants expressed their concerns as follows:

*Depending of which stakeholders there are especially when it comes to security companies, we would divulge our intelligence that we have gathered on that level. Previously we had actually gone to the Station Commander or the members that are involved in copper cable theft problems, and we would discuss the issues with him/them directly. I would not bring our information out in the meetings like that.*

*To my knowledge there is no crucial information sharing. There are only a few Forums in the country that are effective. I can even say that there is a lot that is not functional. I am aware of only two Forums in the country that are really functional. If they can get these Forums in each and every Province up and running effectively, there is a lot of information and intelligence that is coming from the private*

sector. Much more can be done to share information that has been gathered that Forum, not only for example in the Province but it must also be shared amongst the other Forums in other Provinces, and it must be shared on the National Forum where your different companies and component in the SAPS are supposed to be part of the meeting.

Keeping information to themselves and not sharing is a problem. Lack of knowledge of syndicate groupings responsible for the thefts over a widespread area and even across provinces. There is only once formal communication that I know about, and that is a monthly mail with minutes and the agenda for the next meeting.

There is no collaboration. They do not understand non-ferrous [copper-related theft]. The big shots in the police I've never experienced on a meeting that people will say listen we received information from source A that this scrap metal dealer is receiving large amounts of Eskom or Telkom. I think there may be a trust issue on the meeting.

#### **4.4.9.6 Non-sharing of information on cases is catastrophic**

One participant shared an example of the effect of non-sharing of crime information by the NFMCCC as follows:

*It was a case that we [CPI] did of one of the dealers here in the Western Cape. It is a single person. It is not a big company. After this case, that is running in the High Court, we noticed that the thieves are now taking copper to another person. The guy is a registered dealer. We wanted to know how many times and what has he given in at another shop, big shop, and big dealer. As far as I understand they [NFMCCC] did not go get that information, but they didn't give it to us. So we give them something, and now they are just keeping it. I don't know what they saw in it. I am sure they did, but they never gave it back to us or asked us to assist, please.*

Other participants shared their views on the negative impact of non-sharing of crime information by the NFMCCC as follows:

*So if we don't share this information in order to catch that specific criminal, we will just shift crime from areas to areas.*

*If there is no sharing of information, it is a useless Forum.*

*The effect is actually catastrophic. If information is not shared and let's say crime then increases in the first place. The element of this crime or let's say the criminal sees nothing is being done and he just goes on with his crime. The economy at the end of the day is hurting because of the crime. Every piece of copper cable that is stolen somewhere in the system has ugly consequences.*

#### **4.4.9.7 Link between SAPS and NFMCCC**

Participants acknowledged the link between the SAPS and the NFMCCC but cast doubt on the relationship's efficiency. Participants raised their voices as follows:

*I can say that the link is there. If it is efficient, I don't think so. The reasons are that the NFMCCC was supposed to provide training to police stations and police officers on the new Act. That was in 2014. They gave training, but even last year when we got to a police station they didn't even know what case to open. They didn't even know the criminal code on the CAS-system. So I don't know if the communication is there. A couple of years later and on police station level people don't even know about this Act.*

*Exactly where a big gap is. A lot of information that comes to the knowledge of some guys, they play the card near the chest. They do not share the information immediately, and it will only be shared with the different people at a later stage when it is too late to take certain actions and judicial or affirmative actions such as performances and of course that is where our big problem lies with the scrap metal dealers.*

One participant concluded by referring to other external factors that influence the effectiveness of the NFMCCC:

*There is a lot of other factors, but that is related to the socio-economic environment—current unemployment. Drug-related definitely in the Western Cape in certain areas. Illegal immigrants that are fluctuating [flocking] into South Africa, and then I think my main thing is there is nobody that is specialized.*

The tenth theme explores participant perceptions of NFMCCC monitoring and co-ordinating crime-combating operations in an integrated manner.

#### **4.4.10 Theme 10: The NFMCCC monitoring and co-ordinating crime-combating operations in an integrated manner**

Some participants were negative about the NFMCCC integrating crime operations while others acknowledged that the NFMCCC serves to integrate information from different stakeholders, but those operations are not managed in an integrated manner.

##### **4.4.10.1 No or some co-ordination of integrated operations**

The majority of participants had a negative perception surrounding the co-ordination of operations by the NFMCCC. The following verbatim quotes summarise these sentiments:

*Definitely not. All the information, I don't even know if there is a central database where all the information is gathered. There must be an active database where people are working on this and getting tasks. I don't think anybody is co-ordinating the information. Not even if a person is arrested.*

*I think individuals consisting of these meetings will come back in their own groupings. They do their own crime analysis. At the current situation, the National Chair, as well as the Provincial Chair, are supposed to co-ordinate this within the meetings. They are looking at their own interest, but I don't think it is co-ordinated.*

*They are monitoring and co-ordinating it [operations] because they give feedback on it. If it is effective, that is another question, but they are monitoring it. It is not effective.*

*No, it is not done. They just hold the meetings, tick it off in the box and that's it. There is also a great deal of power play.*

*I think we are stuck with the strategies as what we have had. Strategy to operations and providing intelligence really. I don't see it changing as such. What is happening with the criminal element is that they change their modus operandi , their strategies. We have seen them changing their strategies all the time. Scrap dealers are not open for picked up bits and pieces of metal. They are there for copper.*

*They [NFMCCC] only focus on one part of this threat, and that is mainly on the compliance side, e.g. scrap metal dealers. If their paperwork is in order and their permits are valid, then they will stop from there. They are not focussed on other criminal activities of these scrap metal dealers. They mostly will focus on the registered scrap metal dealers, but there are many, many illegal scrap metal dealers right through the country. They are the receivers of the stolen property, and they focus mostly on the administrative side of the Second-hand Goods Act and not making use of that for the operational side.*

*It is done, but on different levels, different matters are examined. I think what should be of interest here is that projects should be registered and the entire investigation is run from one office, and then you will achieve success.*

*Yes, I think they [NFMCCC] do combat, and their strategies are well performed, although there is room for improvement. Once again, because of all the role-players, they have around one table, it can actually contribute to the operations. The visits to the dealers and end-users can also be performed more frequently, and the forensic side should also be brought in.*

The eleventh theme explores participant perceptions of the NFMCCC's efficiency and functionality in relation to copper cable theft prevention.

**4.4.11 Theme 11: NFMCCC efficiency and functionality in relation to the prevention of copper cable theft**

From the participants' responses, it emerged that participants were mainly in agreement that in its current format, the NFMCCC is not effective (or only partially effective) and that urgent adaptation needs to be made to improve the efficiency and functionality of this Forum. The participant summaries regarding the functionality and efficiency of the NFMCCC repeat the perceptions indicated in themes 8, 9 and 10 above and are thus not repeated here. Recommendations to improve the efficiency and functionality of the NFMCCC will be presented in chapter six.

**4.5 RESULTS ORIGINATING FROM INTERVIEW WITH SAMPLE GROUP D**

Table 4 (Sample Group D) below illustrates the themes and sub-themes resulting from in-depth interviews with participants from NFMCCC (sample group D).

**Table 4 (Sample Group D)**

<b>THEME 1</b>	<b>Participants perceptions of the aims and objectives of the NFMCCC</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 1.1: Co-ordination and co-operation of SAPS and relevant private enterprises to combat copper cable theft.</li> </ul>
<b>THEME 2</b>	<b>Participant perceptions of the NMFCCC achieving its aims and objectives to combat copper theft crimes</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 2.1: Negative or doubtful that the Forum achieves its aims and objectives.</li> <li>- Sub-theme 2.2: Positive about achieving the co-operative function.</li> </ul>

THEME 3	<p align="center"><b>Perceptions of planned intervention strategies of the NFMCCC to combat copper cable theft in South Africa</b></p>
	<ul style="list-style-type: none"> <li>- Sub-theme 3.1: Understanding or confusion of the nature of the strategies.</li> <li>- Sub-theme 3.2: Understanding of the strategies.</li> <li>- Sub-theme 3.3: Gaps in the understanding and implementation of strategies.</li> </ul>
THEME 4	<p align="center"><b>NFMCCC’s engagement in multi-faceted co-operative relationships, interaction and working agreements with stakeholders</b></p>
	<ul style="list-style-type: none"> <li>- Sub-theme 4.1: Positive responses about interactive relationships of different stakeholders on the NFMCCC.</li> <li>- Sub-theme 4.2: Perceptions about NFMCCC’s operationalisation in an integrated manner to address copper cable theft effectively.</li> <li>- Sub-theme 4.2.1: Positivity regarding linked relationship agreements in the Forum but doubt about co-operation for implementation of the strategy based on intelligence.</li> <li>- Sub-theme 4.2.2: Overall positive responses.</li> </ul>
THEME 5	<p align="center"><b>Diverse experiences of an operational relationship between the NFMCCC and other stakeholders</b></p>
	<ul style="list-style-type: none"> <li>- Sub-theme 5.1: Execution of strategies not happening.</li> <li>- Sub-theme 5.2: Experiences that operations with some stakeholders are positive but lack of co-operation from others.</li> </ul>
THEME 6	<p align="center"><b>Participant perception about the NFMCCC continuously developing and implementing strategies to address identified shortcomings or to improve on existing strategies</b></p>
	<ul style="list-style-type: none"> <li>- Sub-theme 6.1: Lack of clarity of mandate and investigation division.</li> <li>- Sub-theme 6.2: Lack of senior officers’ committed representation on the NFMCCC.</li> <li>- Sub-theme 6.3: Lack of focus on illegal trading.</li> <li>- Sub-theme 6.4: Perceptions about formal communications for effective functioning.</li> <li>- Sub-theme 6.4.1: Statistical information is shared at meetings, and electronic media help with sharing information amongst individual.</li> <li>- Sub-theme 6.4.2: Perceptions that the flow of information from the Forum to ground level is affected by sensitivity for harmful leakage of information.</li> <li>- Sub-theme 6.5: Lack of committed and competent SAPS human resources and lack of infrastructure</li> <li>- Sub-theme 6.6: Lack of or too little training.</li> </ul>



<b>THEME 7</b>	<b>Perceptions on the NFMCCC's continuous evaluation and adaptation/development and implementation of strategies to address identified shortcomings to improve on existing strategies</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 7.1: Feedback on meetings perceived as evaluation.</li> <li>- Sub-theme 7.2: Perceptions that evaluation of strategies and thus also not adaptations of strategies.</li> <li>- Sub-theme 7.3: Perceptions about a crime threat analysis to determine copper cable crime trends and NFMCCC action upon identified crime threat analysis.</li> <li>- Sub-theme 7.3.1: Positive perceptions about a crime threat analysis and action.</li> <li>- Sub-theme 7.3.2: Positive experience of strategies based on a crime threat analysis.</li> <li>- Sub-theme 7.3.3: Perceptions that evaluations and adaptation of strategies are not happening.</li> </ul>
<b>THEME 8</b>	<b>NFMCCC's monitoring and co-ordinating of crime-combating operations</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 8.1: Overall uncertainty/doubt of co-ordination of operations.</li> </ul>
<b>THEME 9</b>	<b>Perceptions about an efficient link between NFMCCC and police stations, government departments and other stakeholders</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 9.1: A structure exists for linking but room for improvement regarding representation information sharing insufficient and should be included intelligence, not just stats.</li> </ul>
<b>THEME 10</b>	<b>The functionality of the NFMCCC</b>
	<ul style="list-style-type: none"> <li>- Sub-theme 10.1: Partially functional. Except for one reported as functional.</li> </ul>

The researcher presents and discusses responses from sample group D by quoting responses verbatim as received from participants.

#### **4.5.1 Theme 1: Participants perceptions of the aims and objectives of the NFMCCC**

Like the participant feedback from sample group C, sample group D agreed that SAPS and relevant enterprises' co-ordination and co-operation to combat copper cable theft is not always sound. One participant's viewpoint is reflected using the following verbatim response:

*It is the collaboration between the SAPS and all the different role-players whether it is mines, Transnet, or Eskom to combat the theft of the non-ferrous metal (copper cable) and at the end, the essential infrastructure to identify the crime threats, gathered information relating to that to co-ordinate all the crime combating, the crime intelligence.*

In addition, two participants suggested the following to improve co-ordination and co-operation by SAPS and relevant private enterprises to combat copper cable theft:

*To plan and co-ordinate efforts between stakeholders as well as the SAPS in order to address non-ferrous metal theft, copper cable theft as well as the export of these products.*

*A platform where SAPS and stakeholders can plan and share information.*

#### **4.5.2 Theme 2: Participant perceptions of the NFMCCC achieving its aims and objectives to combat copper cable theft**

Most of the participants' opined that the aims and objectives of the NFMCCC are not always clear and should be revisited in line with new developments regarding copper theft and the Criminal Matters Amendment Act.

The sub-themes resultant from Theme 2 are discussed below.

##### ***4.5.2.1 Negative or doubtful that the NFMCCC achieves its aims and objectives***

The majority of participants posited that the NFMCCC currently does not achieve its aims and objectives. These opinions are illustrated as follows:

*I think the efforts they do put in are there to get the right objective sorted out, but the resolution is not coming through.*

*Perhaps sometimes too much focus on the feedback from the stations and clusters level where there is a lot of information shared that is not really applicable to this situation or have an effect which could have been better utilised in planning and strategies.*

*My view is two-folded, yes and no. No for the simple reason that there is an escalation in copper cable-related activities, and over the years it seems that there is very little impact. Maybe the lack of knowledge contributed negatively to the outcome.*

#### **4.5.2.2 Positivity about the NFMCCC achieving co-operation**

Two participants were positive and mentioned the advantage of co-operation among stakeholders that assists in focusing on hotspots. These participants summarised their opinions as follow:

*I can say it does achieve [the aim and objectives]. The reason I am saying that is because maybe we identify a certain area where there is a hotspot of copper cable theft. We conduct intelligence-driven operations to go and curb, or maybe the incident has already happened. If we see that there is a tendency, we direct our operations towards that.*

*The stakeholders are the ones taking us to the hotspot area, where there is copper cable theft.*

The third theme explores participant perceptions of planned intervention strategies by the NFMCCC to combat copper cable theft in South Africa.

#### **4.5.3 Theme 3: Participant perceptions of planned intervention strategies by the NFMCCC to combat copper cable theft in South Africa**

It emerged from discussions that the NFMCCC planned intervention strategies are not consulted at all the levels, particularly at the grass-root level.

The sub-themes resultant from Theme 3 are discussed below.

#### **4.5.3.1 Understanding or confusion of the nature of the strategies planned for achieving the goals**

The participant responses indicate confusion between the concepts 'objectives' and 'strategy' as indicated below. However, some participants elaborated on the objectives as instruments for the planning of strategies:

*They have to co-ordinate the efforts in combating the whole non-ferrous in the essential infrastructure to get a decrease in the incidents that are taking place. Enhance the co-operation between the different role-players, whether it is in the private sector or the police within the state departments to sort it out. Ensure the utilisation of the necessary legislation in line with that.*

*To get all interested and affected parties together to come up with solutions and share best practices and to discuss legal issues and possibly revise the revision.*

#### **4.5.3.2 Understanding of the strategies**

Some participants provided examples indicating that they are knowledgeable about intervention strategies by the NFMCCC to combat copper cable theft in South Africa:

*I understand what we do and what we should do. I am with these investigations from 1989. I started with these investigations on non-ferrous metals (copper cable) and scrap metal dealers. We firstly look in the market at the material that was stolen whether it was transformers, overhead conductors, copper cables or earth leaking in substations. You look in the community what are stolen the most.*

*Your syndicates mostly operate in the Highveld and Witbank area. They are asking for certain scrap metal dealers, the receivers. What does the receiver need, maybe he has got an export permit? The copper inside the transformers has a purity of 99,5%.*

*I understand their objectives though they are very clear, but there is a lot of red tape in whatever they can do. We have local point where the cases are reported, and there is a local point in each and every police station where the NFMCCC crimes are reported. The problem is if you know where your copper went to then you want them to have search and seizure. They must have a Court order that makes the process very difficult.*

#### **4.5.3.3 Gaps in the understanding and implementation of strategies**

Although not a general theme, the following participant's response is included to identifying shortcomings relating to involvement in strategies:

*I won't say I have a clear understanding and knowledge of all the strategies. I wasn't involved in those processes, so I won't be able to tell you in-depth what the actual strategies of the Forum will be.*

The fourth resultant theme that follows for discussion explores participants' perceptions of the NFMCCC's engagement in multi-faceted cooperative relationships, interaction and working agreements with stakeholders.

#### **4.5.4 Theme 4: NFMCCC's engagement in multi-faceted co-operative relationships, interaction and working agreements with stakeholders**

The participants opined that from time-to-time good working relationships exist, specifically in the hotspot areas. However, all participants agreed that the notion of co-operative relationships must be revisited, e.g., a memorandum of understanding should be created to improve communication in a multi-faceted co-operative relationship and improve interaction with stakeholders.

The sub-themes resultant from Theme 4 are discussed below.

##### **4.5.4.1 Positive responses about interactive relationships between different stakeholders of the NFMCCC**

Participants also offered examples of positive working relationships. On the whole, they referred to monthly meetings where information is shared and sometimes

planning is undertaken. The issue seems to be the operationalisation of strategies as indicated in earlier themes:

*We have a good relationship with certain SAPS members and NPA Advocate. We can work together, but I think it can improve. Currently, the NFMCCC is driven by visible policing in the SAPS. I feel that if this mandate can move to the DPCI, it will be more focussed.*

*All the stakeholders are there. Everybody that can and provides value and inputs are all attending the meetings from Justice [Department of Justice] to SARS to the various stakeholders affected by problems and the SAPS.*

*By the look of the role-players that are there, I can say that it is co-ordinated in an integrated manner because we have State own entities and private companies. You have Telkom, your Vodacom and the SOE's, the people that have lots of copper deposits with them. I think it is integrated.*

#### **4.5.4.2 Positivity about linked relationships/agreements in the NFMCCC but doubtful about the co-operation on implementation of strategy based on intelligence**

A success story in sample group C related to linked relationships and/or agreements in the NFMCCC was mentioned by one participant as follows:

*We had a copper cable syndicate within the Western Cape, and we started to monitor this syndicate and realized the same syndicate are targeting the Northern Cape area. So within the Western Cape, we approached this body as well as other members from DPCI. We wanted to look into the syndicate from an organised crime perspective. We gathered all the information. We made proposals, and we just couldn't get this from the ground, and we worked with a specific individual in the Northern Cape, a normal detective that doesn't belong to this Forum. He is on station level, and we approached him and asked him for assistance in getting this from*

*the ground. We started to analyse data. At the end of the day, we combined 17 cases within the Northern Cape as well as the Western Cape. It was actually scary that the Western Cape didn't want to be the leader in this, because we arrested two of the people that are buying copper from the syndicate members and then again selling it to a specific scrapyards within the Western Cape. This case is currently in the High Court.*

Another participant acknowledged linked relationships and/or agreements in the NFMCCC; however, he questioned the implementation of strategies: *"The link is there, but the plans and the execution to get to the strategies and the goals are not there."*

Two participants mentioned an excellent working relationship:

*The Copper Forum and the Mine Crime Combating Forum are two different forums of which copper are part of the Mine Crime Combating Forum. From the stakeholders' side, we have had quite a good session where we got a professional guy who assisted us. I am happy with the Copper Forum, and I am pleased that there is a Mine Crime Combating Forum as well.*

*What has been written paper has been done, but practically currently it is not working because everybody has got his own idea and he is doing his own thing. I think what is lacking is clear responsibilities and accountability to certain persons and the exception of that by the leaders. As soon as we go back and everybody is accepting his role and responsibility, and he does his work then we will maybe succeed. Whose mandate is it to investigate level 1 to until level 3, because it is not the HAWK's mandate? The guy on the ground cannot do a 252 application. Some of them don't even know how to do a 205 application of the suspect that you want to follow. Currently, we've got to go on our knees and beg for help when you've got hot spots, specific hotspot areas. ... but the detectives, the HAWKS and Crime Intelligence disappeared, and that is the problem.*

*It can improve a lot if you involve your role-players like your operational crime intelligence capacity if the focus will be placed more on intelligent driven operations rather than disruptive operations.*

#### **4.5.4.3 Overall positive responses**

Some participants responded positively about the NFMCCC's integrated operationalisation to address copper cable theft effectively but did not elaborate on the implementation:

*If we are talking about integrated approach, we are talking about the involvement of all parties who are involved like police and the stakeholders. It is an integrated approach because the stakeholders cannot operate in isolation without the police, and we also don't operate in isolation without the stakeholders. It is integrated.*

*An integrated approach is utilised because the NFMCCC is not about the police only, it is about various stakeholders, and if you see, there is a problem in a certain company we go together and operate in terms of combating the theft of copper cables.*

The fifth theme explores participant perceptions of the diverse experiences of operational relationships between the NFMCCC and other stakeholders.

#### **4.5.5 Theme 5: Diverse experiences of operational relationship between the NFMCCC and other stakeholders**

Linking to the previous theme, participants elaborated after further probing about the relationship between the NFMCCC and other stakeholders. Although positive responses emerged about the relationship and interactions between NFMCCC members represented on the Forum meetings, some participants experienced the functional relationships and execution as not functioning effectively.

The sub-themes resultant from Theme 5 are discussed below.



#### **4.5.5.1 Execution of strategies not happening**

One participant was pessimistic about relationships between the NFMCCC and other stakeholders at the grass-roots level: *“I am talking about what happens below, the operational execution thereof. It does not happen, and I have all the evidence.”*

Another participant similarly highlighted the lack of operational relationships between the NFMCCC and other stakeholders at the grass-roots level. This participant highlighted disagreements between SAPS and stakeholders as a primary inhibiting factor:

*Based on the meetings I have attended, and in general, there is fairly good co-operation, but a highlight that is also standing out is that there are always quarrels between the stakeholders and the SAPS mainly because of the lack of support from SAPS and attending crime scenes and then following through with the cases. The SAPS members attending the meetings know the aims and objectives, but it doesn't boil down to the officers in the charge office. There is a gap in communication and a lack of co-operation between senior SAPS members as well as the people on the ground.*

#### **4.5.5.2 Participant experiences of operations with some stakeholders are positive but lack of co-operation from others**

One participant presented a case study of an exemplary operational relationship between the NFMCCC and stakeholders and but also demonstrated conflict with others:

*I would say there is a good relationship. The NFMCCC in our province are working together with Eskom, Telkom, Transnet, and the farmers union. We had encountered a problem with the mine workers at Marikana. We handled it, and we sorted it out. The biggest problem is that the mines hijack the mining forum for their own purpose and then they pushed the NFMCCC to the side, and that causes conflict. When there is copper cable maybe recovered in a certain area, then the DSP of that particular station phone me because we have contact numbers of various stakeholders. Previously they phoned me as I was the provincial co-ordinator.*

The sixth theme explores participant perceptions of the factors that hinder the successful implementation of policing strategies implemented by the NFMCCC.

#### **4.5.6 Theme 6: Factors that hinder the successful implementation of policing strategies implemented by the NFMCCC**

It emerged from discussions with participants that the lack of persistency and trustworthiness between the stakeholders and the SAPS, and power struggles influence the successful implementation of policing strategies implemented by the NFMCCC. However, various participants made it clear that they attempt to implement new ideas to enhance the effectiveness of policing strategies with a pro-active approach to preventing copper cable theft in South Africa.

The sub-themes resultant from Theme 6 are discussed below.

##### ***4.5.6.1 Lack of clarity of mandate and investigation work division***

Participants indicated that the mandate of the NFMCCC, which functions under the SAPS Visible Policing Division is not always clear to the detectives, because the Visible Policing Division regard their mandate as ensuring compliance in terms of Sec. 28(1) of the Second-Hand Goods Act 6 of 2009, and detectives do not usually see copper cable theft as their priority. Participants voiced their concerns as follows:

*There is no cross station, cluster, proper provincial investigation going on if there is not a task team involved.*

*We want the authority to check those scrap yards that we have identified and go there with a search warrant and most of the time we find that the scrap has been moved.*

##### ***4.5.6.2 Lack of senior officers' committed representation on the NFMCCC***

Participants believed the absence of senior officers and senior personnel who serve on the NFMCCC causes a lack of commitment and distraction from the NFMCCC's focus on combating copper cable theft.

*It is the manpower and willingness to let the NFMCCC succeed because we went into a stage or phase where we found from the parastatals side that sometimes you have been send to a meeting*

*by the senior that is part of their structure that should have been on the meeting.*

#### **4.5.6.3 Lack of focus on illegal trading**

It emerged that role-players serving on the NFMCCC focus more on crime information and data, but lack focus on illegal trading, which not seen as a priority:

*Focus area should shift more from compliance inspections, disruptive operations, cluster operations and those things to illegal trading. Not the guys that are doing the things correctly by the book. That is where intelligence capacity comes in. The guy from Crime Intelligence attending the NFMCCC meeting is merely there to present the stats of the previous month. There need more of the operational people of Crime intelligence, DPCI involved in these meetings.*

#### **4.5.6.4 Perceptions about formal communication procedures for effective functioning**

All participants acknowledged the importance of sharing crime information using formal procedures, but diverse responses emerged about what it implies and existing communication procedures.

#### **4.5.6.5 Statistical information is shared at meetings, and electronic media helps with sharing information amongst individuals**

A recurrent theme is that the Forum provides an opportunity to share statistical information about copper cable crime-related incidents, but that the information is not utilised for planning and evaluating specific strategic interventions. In this section, some participants identify the reasons for that, one of which is mistrust:

*The sharing of information is there. I just think it is one of the other things at Makaken a big problem, corrupt security officers and corrupt police officials. The people are forced to do disruptive operations with limited information capability to make a success of that and then the corrupt people inside going missing.*

*The stakeholders on the private company's side got WhatsApp groups that they are using between each other. They've got one-on-one liaising with the other company's people.*

*The focus is currently more on statistics of the previous month than on planning actual intelligence, driven operations. Statistics are given, but the convictions are left open.*

*Information is shared during the NFMCCC meeting. It is also shared via the WhatsApp group that was created at Mpumalanga NFMCCC as well as telephonically.*

#### **4.5.6.6 Perceptions that the flow of information from the NFMCCC to ground level is affected by sensitivity to harmful leakage of information**

It became evident that copper-related crime information is only shared on a need-to-know basis by the NFMCCC and only to top Management due to mistrust and corruption internally and externally:

*There is a lack of communication from National and Provincial side, and there is not one NFMCCC in the bordering province. There is nobody to liaise with.*

*Sometimes when we have to execute these operations, it will be an undercover operation where maybe the local members are not involved, because we have the feeling of some leakage of information. The police investigators will be included and maybe the HAWKS.*

*Lots of time the information does not flow from where we have discussed it at the NFMCCC right down to station level and then when you get to station level the members have not received instructions from the NFMCCC platform. If it is not shared, it might be that it could be sensitive investigations being carried on and there might be a possibility that the information can leak so the owner or informant will use his discretion.*

One participant, who commented positively about the sharing of crime information related to copper theft, also commented on formal communication procedures: “*The communication is extremely poor. They only communicate during meetings and operations. Anything outside that, there is no communication.*”

Another participant summarised the perception about a lack of shared crime information related to copper theft: “*The effect of not sharing is a matter of the left arm doesn’t know what the right arm is doing, and it will have a negative impact on eventually apprehended suspects as well as successful prosecution.*”

#### ***4.5.6.7 Lack of commitment and competent SAPS human resources as well as lack of infrastructure and operational resources***

Participants also referred to a lack of competent/knowledgeable SAPS human resources and lack of vehicles for investigation as issues that prevent successful operations:

*The breakdown comes in the proper investigation and utilising the legislation and all the tools necessary to get to a strategy to minimise copper cable theft.*

*There is battling in getting cases registered. Maybe cases are registered under the wrong SAPS codes. There are always excuses of lack of vehicles, the lack of immediate support when it is needed, and that contributes to the frustration and success levels.*

*Lack of knowledge on the relevant legislation requirements on the base-line at police stations itself as well as the will to co-operate. When you report at the charge office, they don’t know the Act, but the specific police that are dealing with the NFMCCC we know who to contact.*

*My experience is that the successful implementation of policing strategies implemented by the NFMCCC to address copper cable theft is where the stakeholders give the information or the dealers who are receiving the copper.*

#### **4.5.6.8 Lack of or too little training**

Participants identified copper-related crime training and alternative awareness campaigns to empower SAPS members with appropriate knowledge since there is a need for more efficient communication and additional trained SAPS officers:

*I think a pamphlet type of thing explaining the different commodities of each of the stakeholders is definitely useful. At least then you empower the SAPS, for example, on identifying these commodities. Usually, we will be part of that operation so we will take responsibility of identifying the commodities by assisting them.*

*I don't believe that they are doing enough with regards to SAPS members. Stakeholders themselves know their product and their equipment, and they know their materials, but with the SAPS it is a big struggle for them to identify and to know even with the new Criminal Amendment Matters Act it has been taken a long time for them to learn the Act and to implement it correctly.*

The seventh theme explores participant perceptions of the NFMCCC's continuous evaluation and adaptation/development and strategies to address identified shortcomings to improve existing strategies.

#### **4.5.7 Theme 7: Participant perceptions of the NFMCCC's continuous evaluation and adaptation/development and implementation of strategies to address identified shortcomings to improve on existing strategies**

Participants had diverse perceptions on whether the NFMCCC continuously evaluates, adapts, develops, and implements strategies to address identified shortcomings to improve on existing strategies.

The sub-themes resultant from Theme 7 are discussed below.

##### **4.5.7.1 Feedback on meetings perceived as evaluation**

It emerged from the interviews that feedback occurs at the NFMCCC meetings, but the focus is on statistics, but not conviction rates for copper cable theft in South Africa:

*“Feedback is done on the monthly meetings. Another problem that is experienced is that there are always different representatives from the different entities attending the meetings. There is not a continuous flow of processes every month.”*

#### **4.5.7.2 Perceptions that evaluation of strategies is not happening and thus no strategic adaption occurs**

Participants indicated that evaluation of policing strategies occurs, and as a result, they have identified new strategies specifically for Mpumalanga, which will be based on incidents that serve as best practices:

*The evaluation is not lying with the Chairperson. The NFMCCC continuously monitor because they ask the questions. They give the taskings, ask the questions and evaluate strategies to determine its impact.*

*The strategies should be confirmed more frequently and then outcomes tested according to the strategy and strategies to be adjusted more frequently if there are no effective success rates.*

#### **4.5.7.3 Participant perceptions about crime threat analysis to determine copper cable crime trends and NFMCCC action upon identified crime threat analysis**

Some participants believed that crime threat analysis to determine copper cable theft trends and subsequent NFMCCC’s action is undertaken by Crime Intelligence (CI). Comparisons are then shared effectively at the NFMCCC meetings:

*Crime intelligence is coming down with some stats saying we have had so many incidents. From Crime intelligence, very little information is received on copper cable theft. The threat analysis and the trend come into the Copper Forum are given back to the station, and now they must act on the information from Crime intelligence. In Mpumalanga, it is the Crime intelligence doing that.*

*Crime threat analysis are being conducted. When we are in the Forum, there is a person from Crime Intelligence from National*

*Registrar who will show us the comparison in order to show us to which are there is a threat of copper cable theft.*

*They do crime threat crime analysis to determine the copper cable crime trends because it is costing South Africa a lot of money in the essential infrastructure.*

#### **4.5.7.4 Participant perceptions that evaluations and adaptations of strategies are not happening**

One participant believed that proper evaluation and adaptation of strategies are not happening since crime information and data are often outdated due to meetings occurring only once a month:

*We've got the stats from CIG [Crime Intelligence Gathering] that is coming to us on each meeting – how many thefts and what the losses per private company was. We don't see the analysis coming through into an operation. Currently, there is not enough intelligence. We can have information, but it cannot be verified to be put over into intelligence so that we can do a proper intelligence operation.*

The eighth theme explores participant perceptions of the NFMCCC's monitoring and co-ordination of crime combating operations.

#### **4.5.8 Theme 8: NFMCCC's monitoring and co-ordination of crime combating operations**

From the interviews, it appears that the NFMCCC does not always monitor and co-ordinate crime combating operations and often leaves it to the parastatals who do not have the power to arrest resulting in conflict between the stakeholders and the SAPS.

##### **4.5.8.1 Participants' perceptions of the overall uncertainty/doubt on the co-ordination of operations**

There was general uncertainty among participants about the NFMCCC's efficiency in monitoring and co-ordinating operations and a feeling that the SAPS lacks mandate and/or commitment:

*From their side, I think they are doing everything that they can to assist. The question is now the execution of crime intelligence-driven operation ... how can you for 10 years not arrest that guy?*



*It has been done, currently now for the past 5 months, there is a lot of doubt, because there are no operations currently. Previously we concentrated on that, and I want to say that the companies took the lead.*

*I am not convinced of that, and there is a lot of room for improvement, and that is purely because the focus is more on compliance and disruptive operations and understanding the real thing and the Act accordingly and then intelligence-driven operations rather than just disruptive operations.*

*We, as the police are co-ordinating and monitoring the crime combating operations and focus on the dealers and the suppliers whether they did receive the stolen copper.*

The ninth theme explores participant perceptions about the efficiency of the link between NFMCCC and police stations, government departments and other stakeholders.

#### **4.5.9 Theme 9: Participant perceptions about an efficient link between NFMCCC, police stations, government departments and other stakeholders**

From the interviews, it appeared that the various entities operate in silos and only nurture a link during copper cable theft incidents and after that revert to operating in silos. This situation becomes more apparent (especially in the case of the SAPS) once the matter goes to court.

##### ***4.5.9.1 A structure exists for linking, but there is room for improvement regarding representation; information sharing insufficient and should include intelligence and not just statistics***

It transpired from the interviews that a link exists between the NFMCCC, police stations, government departments and other stakeholders; however, it is not optimally implemented:

*They are bringing all the people together with a plan, but the execution is not going through.*

*All role-players are represented. The only problem is if the role-players do not have consistent representation with regards to coming to the meetings.*

*There is a link because as I have already mentioned when we are talking about government institutions, we've also got the National Forum where the Provincial Forum is also reporting to in terms of what is being done by our Provincial Forum and when we are talking about our Provincial Forum, we are talking about the stations all over the Province.*

*It is supposed to be, but there is room for improvement.*

*There is a really good link, but it needs to be empowered. The police need to get their powers back.*

The tenth theme explores participant perceptions about the functionality of the NFMCCC.

#### **4.5.10 Theme 10: Functionality of the NFMCCC**

The overall perception of participants was that the NFMCCC is partially functional. The Forum serves as a platform for sharing information about non-ferrous metals and networking with external stakeholders, but the operational part is ineffective, referring to the previously reported shortcomings/challenges.

##### **4.5.10.1 Partially functional**

Participants made it clear that the NFMCCC is functional, but not as effective as it should be:

*It is a good platform for networking. You get to know the right people. Build relationships with the right people. Between our stakeholders, we are then able to at least know there is some good coming from it, and it is functional for as long as the stakeholders communicate with each other.*

*I believe it is currently not running as optimal as it can. It does have a good impact. All of the stakeholders and the SAPS have an*

*opportunity to share their experiences, and whatever they achieved or did not achieve or whether they were struggling with anything then that can be relayed to each other.*

*It does make a positive contribution, but we are far from being effective. Just getting feedback on the escalation of copper cable-related theft means that we are not successful. The bottom-line test is the increase in the amount of copper cable-related thefts and the huge monetary values that are reported and then also the few success rates.*

One participant was positive about the functionality of the Forum in his Province: “*In Mpumalanga, I can say it is 99% functional and efficient because we have our meetings, and we will also conduct our operations together with stakeholders*”.

#### **4.6 SUMMARY**

This chapter presented the combined qualitative data obtained from in-depth interviews with awaiting trial detainees at Pollsmoor Correctional Centre Western Cape, representatives from Mpumalanga and Gauteng Provincial NFMCCC's, BACSA, and CPI private investigators. The participants' experiences and views were presented via identified themes and sub-themes. The participant views were cited verbatim to highlight their opinions, observations, and experiences. The in-depth interviews provided the researcher with an improved insight into the participant experiences of copper cable theft in South Africa.

In chapter five, the researcher concentrates on research outputs and findings.

## CHAPTER 5

### INTERPRETATION OF THE RESEARCH FINDINGS

#### 5.1 INTRODUCTION

In this chapter, the researcher presents the interpreted data arising from in-depth interviews with awaiting trial detainees (on charges of copper theft) at Pollsmoor Correctional Centre Western Cape, Mpumalanga Provincial NFMCCC and Gauteng Provincial NFMCCC, BACSA, and CPI private investigators (as described in chapter one). The interpretation is presented by way of themes and sub-themes that were categorised and presented in chapter four. These identified themes and sub-themes are associated with the participants' day-to-day experiences of copper cable theft.

The above approach speaks to the research problem, the purpose of the study, the research aims, and the research questions presented in chapter one. This chapter aims to understand the participants' experiences by measuring participant experiences against the literature presented in chapter one to three.

The research findings' interpretation commences with a synopsis per theme, supplemented with the relevant literature, as per chapter one to three. The interpretation aimed to create an improved understanding of the impact of the NFMCCC on the combating of copper cable theft and therein:

- To describe the extent and impact of copper cable theft in South Africa.
- To describe the impact of the NFMCCC on the combating of copper cable theft.
- To explore the co-operation between government and industry stakeholders who form part of the NFMCCC to combat copper cable theft.
- To investigate factors that hinder the implementation of effective policing strategies to address copper cable theft.
- To examine current policing strategies to address copper cable theft.

The section below presents a discussion of sample group A's perceptions of the various Themes which arose from the in-depth interviews.

## **5.2 SAMPLE GROUP A – AWAITING TRIAL DETAINEES (DETAINED ON CHARGES OF COPPER THEFT) AT POLLSMOOR CORRECTIONAL CENTRE, WESTERN CAPE**

### **5.2.1 Theme 1: Participant perceptions/awareness of damage caused by copper cable theft**

The literature presented in chapter two highlights the damage caused by copper cable theft. Parks (2015:2) estimated that the crime costs South Africa up to R 7 billion per annum. In addition, it takes a toll on human life as is evident in the case where two people died, 19 were critically injured and a further 281 were injured when two trains collided near Pretoria in January 2011 (as discussed earlier). This collision resulted from the theft of two 25-metre copper cables, which disrupted the signalling system. The financial cost of this accident to trains and rails was more than R 22 million.

*Mawisa for Carte Blanche* (2019) reported that criminals target copper cables from essential infrastructures like power lines and communication networks and their action border on sabotage as syndicates make millions. In addition, and as emphasised in para. 2.3.1, the damage caused by copper cable theft affects the victims directly and indirectly.

Damage caused by copper cable theft is furthermore accentuated in para. 2.3.3. Parks (2015:2), as per para. 2.3.3 states that Telkom has simply stopped replacing stolen cables due to the high theft rate. Workers' jobs at Eskom, Telkom and Transnet are threatened, as those state-owned companies have drained their funds trying to repair the damage caused by copper cable and metal theft. Workers and companies suffer further financial losses due to the constant train delays caused by copper cable theft.

From the in-depth interviews, as presented in para. 4.2.1, it became evident that most participants realise the impact of damages caused to infrastructure because of copper cable theft. However, some of these offenders only realise the extent of the damage they caused when they appear in court.

The majority of thieves are well aware of the damage caused by copper cable theft. These criminals are insensitive towards the consequences of their actions. Damage to

critical infrastructure and even the loss of life in some instances does not deter copper cable thieves.

### **5.2.2 Theme 2: Planning the copper cable theft**

The literature discussed in para. 2.6.1, highlights the involvement of individuals and organised crime, which relies on inside information and expert reconnaissance to plan their copper cable theft. Torkelson (2010:1 & 2) confirms that many networks are domestic, but evidence suggests the involvement of militarily trained cells from Southern Africa. Elvia (2018:1) explains, as emphasised in para. 3.1 that the strategy of most copper thieves is to operate under cover of darkness.

From the in-depth interviews conducted, as presented in para. 4.2.2, it became evident that most copper cable thieves have evolved into skilled and trained criminals and conduct thorough planning and surveillance before executing the crime.

### **5.2.3 Theme 3: At the wrong place at the wrong time**

The literature presented in chapter two (para. 2.4.3.2), stipulates that national legislation contained within the CPA highlights that any person who unlawfully and intentionally –

- (a) Tamper with, damages, or destroys essential infrastructure in; or
- (b) Concludes with or assists another person in the commission, performance or carrying out of an activity referred to in paragraph (a), and who knows or ought reasonably to have known or suspected that it is essential infrastructure, is guilty of an offence and liable on conviction to a period of imprisonment not exceeding 30 years.

Venter (2008:1), highlights (as discussed in para. 2.6.1), that the typical small-time copper thief (“*bread and butter thieves*”) is a subsistence criminal who is financially underprivileged. These subsistence criminals' hopeless position is capitalised on by organised crime elements that employed them to steal. However, they are in the minority as gangs manage most copper theft, while large cartels work in the scrap trade.

From the in-depth interviews conducted, most participants echoed their innocence of the crime.

#### **5.2.4 Theme 4: The motivation and incentive to commit copper cable theft**

As noted in para. 2.6.1, and according to Torkelson (2010:1 & 2) the consistently high price of copper makes it a valuable commodity for illicit business. Thieves are sophisticated market analysts, who decide when the price of copper has risen to a point where the theft of the commodity (weighed against the risk) is more financially rewarding than any other. Copper is widely available, poorly secured, and easy to steal due to the extensive transportation, power and communication networks belonging to Transnet, Eskom, and Telkom. It is also effortless to sell, due to eager scrap dealers, looking to profit. Consequently, many actors – from petty thieves and organised criminals to scrap dealers and private security companies – benefit from this illicit economy. In para. 2.7.1, the researcher refers to Kolevar (2007:1), who reiterates that copper cable theft is on the rise all over the world. Large concentrations of copper in one place make a lucrative target for theft. Bergal (2018:1), as noted in para. 2.7.1 confirms the profitability of stealing copper. Copper cable thieves take their loot to scrap recycling yards to sell something, they effectively received for nothing. Similarly, according to Koba (2013:1), copper is attractive to thieves because it is easy to steal; it is difficult to get caught stealing, and the penalties when caught are merely a reprimand. Van Dalen (2017:2), as noted in para. 3.1, further confirms that the illegal trade in non-ferrous metals has become a multi-million Rand trade in South Africa, with people involved from all social classes.

Many participants, as referred to in para. 4.2.4.1, confirmed that copper cable theft and the later selling of this precious metal are financially rewarding crimes supported by scrap metal buyers facilitating an easy market for selling. The fact that participants repeatedly commit copper cable theft was also emphasised during the interviews, and the participants acknowledged the profitability of selling stolen copper, confirming that many perpetrators commit this crime for a living. In effect, many legal scrap metal dealers serve as enablers for copper cable theft reimbursing the perpetrators a minimum fee for the stolen copper and therefore facilitate copper cable theft in South Africa.

In addition, it became evident from the in-depth interviews with awaiting trial detainees charged with copper cable theft, and as demonstrated in para. 4.2.4.2 that many perpetrators are drug abusers and commit the crime to finance their drug habit. Consequently, a sustained market for the seller is created. It also became evident that the risk of being electrocuted does not deter these perpetrators.

#### **5.2.5 Theme 5: Facilitating/reinforcing factors for copper cable theft**

As stated by Nationwide (2019:1), and as noted in para. 3.2.1, increased demand for copper from Asian markets such as China and India have created a thriving international scrap trade.

It became evident from the in-depth interviews with awaiting trial detainees charged with copper cable theft that the theft is facilitated by the burning of trains and load shedding since there is no live electric current, and thus no risk of electrocution for perpetrators. As a result, the burnt wires are then laid bare, and it is not necessary to strip the plastic casing. The same applies during load shedding because it is an exceptionally insignificant risk as there is no live current running through the cables.

In addition, the in-depth interviews with awaiting trial prisoners (as noted in para. 4.2.5.1), revealed that many security personnel responsible for securing parastatal assets are corrupt and involved in stealing copper cables from their employers.

#### **5.2.6 Theme 6: Executing the alleged offence**

As noted in para. 2.6.1, and according to Torkelson (2010:1 & 2) organised crime networks have been implicated in the theft of miles of copper cable from peri-urban or rural areas in Gauteng, the North West and KwaZulu-Natal. Many networks are domestic, but recent evidence suggests the involvement of militarily trained cells from Southern Africa. Their *modus operandi* entails stealing underground cable in the early hours of the morning, or from electrical substations, construction sites or vehicles in transit. Criminals use hired vehicles to transport the copper. The perpetrators even use trucks and ambulances.

International literature reviewed in para. 2.7.1 illustrates copper theft in the USA. Kolevar (2007:1), as noted in para. 2.7.1, explains the theft of copper wire from US



utilities primarily at substation transformers, from utility poles, streetlights, or the back of service trucks. According to CMC Queensland (2012:10), as noted in para. 2.7.4, copper is stolen from locations such as power stations, railway lines, telecommunication facilities, churches, construction sites and unoccupied buildings.

As observed in para. 2.7.1, the FBI (2008:1) states that copper thieves are threatening US critical infrastructure by targeting electrical substations, cellular towers, telephone lines, railroads, water wells, construction sites, and vacant homes for lucrative profits. As stated by Van Dalen (2017:2), mentioned in para. 3.1, equipment and copper cables containing non-ferrous metals have proven to be the dominant targets. Other strategic objects are also targeted like drain covers, solar panels, water-meters and (the latest addition) transformer oil.

The participant responses, as noted in para. 4.2.6.1, illustrate the *Anaconda* is usually the last resort for perpetrators, because the risk is higher, and it is physically demanding work because it requires digging to get to the cables. There is also a more significant risk of electrocution, and the copper bears less value. The *shiny bright* running overhead is easier to steal and has more monetary value.

#### **5.2.7 Theme 7: Perceptions of the protection of copper cables – effectiveness of security and protection measures**

Bindeman (2011:3), as illustrated in para. 2.1, argues for implementing stricter control measures and prosecution based on economic sabotage for copper cable theft and stricter controls on export measures. Bindeman further argues that the SAPS should prioritise copper cable theft as a priority crime. In addition, Robertson (2018), contends, as per para. 2.1 that the SAPS will never effectively control copper cable theft if they do not protect assets (including copper cable) that provide essential services. Similarly, Michael (2012:1) posits that Parliament has indicated that the government is losing the war against copper cable theft. Liebenberg (2018:1), as per para. 2.2 further highlights the magnitude of copper cable theft, explaining that South Africa is experiencing an unprecedented challenge in the high number of copper cable theft incidents. Planting (2011:2), as per para. 2.3.1, warns that the phenomenon of copper cable theft cannot remain unresolved as it can implode and destroy the

country's fragile economy. Pieterse (2017:3) quotes La Marque, as per para. 2.3.4 proposes stricter measures to prevent copper cable theft.

Philip (2014:1), as per para. 3.1, suggests that a strategy to curb copper cable theft is to paint or spray barely visible micro-dots onto both copper cable and steel infrastructure that will allow the police and parastatals to identify cable as stolen effectively and efficiently and instantly identify its owner. Chetty (2010:2), as per para. 3.1, mentions an alternative approach to curb copper cable theft, explaining that in a strategic move, the parastatal Telkom has decided not to replace the copper cables, but rather provide affected customers with wireless services.

### **5.3 SAMPLE GROUP B – BUSINESS AGAINST CRIME SOUTH AFRICA**

#### **5.3.1 Theme 1: BACSA participant perceptions of the aims and objectives of the NFMCCC**

Coetzee (2013:3), as discussed in para. 1.2 confirms that the NFMCCC aims to address theft and other related crimes on national and provincial levels pertaining to non-ferrous metals by implementing a joint venture between the relevant stakeholders. The NFMCCC is also mandated with co-ordinating integrated crime combating operations focusing on the suppliers, dealers, and end-users. The literature, as discussed in para. 1.2, further illustrates that the National NFMCCC and the nine provincial chapters meet once a quarter, to share information between role- players and operationalise initiatives to address non-ferrous metal-related crime.

The responses from BACSA participants, as per para. 4.3.1.1, echoed that the current aim and objective of the NFMCCC to prevent copper cable theft is not based on proactive prevention. It was suggested that legislation addressing non-ferrous metals' theft should be communicated to all role-players to implement effectively. It further emerged, as noted in para. 4.3.1.2 that participants regard the implementation of industry standards for scrap metal dealers and the control of the export market as a significant aim of the NFMCCC in the regulation of non-ferrous metals crimes.

### **5.3.2 Theme 2: Participant perceptions of the NFMCCC achieving its aims and objectives to combat copper cable theft**

As stated in para. 1.3, copper theft and its impact on the South African criminal justice system are confirmed by BACSA, in their National Strategy and Funding Proposal of 2012-2015 (BACSA, 2012) which highlights that non-ferrous metal theft, which includes copper theft, poses a severe threat to the South African criminal justice system and has done so for many years. Van den Berg (2007), as mentioned in para. 1.3, states that the theft of non-ferrous metals, copper, and aluminium in particular, is a severe problem in South Africa and non-ferrous metal theft had escalated to such an extent that losses run into millions of Rand annually.

Most participants replied with diverse opinions about the NFMCCC achieving its aims and objectives, and most agreed that limitations exist. Participants ascribe these circumstances to the insufficiency of communication and the fact that the aims and objectives of the NFMCCC are not aligned to the new Criminal Matters Amendment Act.

One participant agreed that the aims and objectives of the NFMCCC are achieved to some extent since statistics for copper cable theft remain low. However, this participant cautioned that official SAPS statistics on non-ferrous metal-related crime are not reliable because they are often incorrectly captured.

### **5.3.3 Theme 3: Challenges/Constraints to successful implementation**

Bindeman (2011:3), as noted in para. 2.1 suggests stricter control measures and prosecution based on economic sabotage for copper cable theft and stricter controls on export measures. Bindeman argues further that the SAPS should prioritise copper cable theft as a priority crime. According to Robertson (2018), as mentioned in para. 2.1, the SAPS will never effectively control copper cable theft if they do not protect the assets (containing copper cable) that provide essential services. Michael (2012:1), as per para. 2.1, further reiterates that Parliament has indicated that the government is losing the war against copper cable theft.

As discussed in para. 3.3, the need to protect South African infrastructure against copper theft was never foreseen. Infrastructure crime (ferrous, non-ferrous, and

essential infrastructure-related crimes) remains a national priority that should be addressed operationally, primarily to combat the scourge and strategically control and prevent future occurrences.

According to participants, the NFMCCC is inhibited by various factors which makes achieving its aim difficult. It appeared from the in-depth interviews with BACSA participants that the SAPS experiences a challenge to prioritise copper cable theft due to other priorities, limited resources, and insufficient expertise. Echoing his colleague's sentiments, another participant believes the SAPS have too many other crime priorities to address and resultantly copper cable theft is in effect left behind in the bigger scheme of crime prevention. The lack of information sharing and inefficient communication between the NFMCCC and members on the grass-roots level also became evident during the interviews. These shortcomings result in copper cable theft not being pro-actively prevented. Another participant highlighted regular non-attendance of NFMCCC meetings by role-players, which hampers decision-making and the consequent execution of decisions. Replies from participants point to negative experiences regarding the proper and effective implementation of the NFMCCC aims and objectives.

#### **5.3.4 Theme 4: The nature of the expected multi-faceted co-operative relationships, interaction and working agreements with stakeholders**

Coetzee (2013:3), as mentioned in para. 1.2 confirms that the NFMCCC focuses on addressing theft and other related crimes on national and provincial levels pertaining to non-ferrous metals by implementing a joint venture between the relevant stakeholders. The NFMCCC is also mandated with co-ordinating integrated crime combating operations focusing on suppliers, dealers, and end-users. According to the SAPS Annual Report 2014/2015 (SAPS, 2015: 157-158), as per para. 1.2, the National NFMCCC meets once a quarter, as do the nine provincial NFMCCCs to share information between role-players and operationalise initiatives to address non-ferrous metal-related crime. As stipulated in the SAPS Annual Report of 2016/2017, discussed in para. 1.2, a National Operational Committee and Provincial Operational Committees have also been established under the auspices of the SAPS Directorate for Priority Crime Investigation (DPCI) to operationalise the functioning of the NFMCCC through

disruptive operations, and to address all criminal activities associated with non-ferrous metal-related crimes, in an intelligence-led and integrated manner.

Multi-faceted, co-operative relationships, interaction and working agreements with stakeholders are emphasised in the SAPS Annual Performance Plan 2018/2019 (SAPS, 2019:3), as per para. 2.5.1, which stipulates that the Mining Crime Combating Forum and Non-Ferrous Metal Crime Committees should be operationalised at the appropriate organisational levels to effectively combat copper cable theft and focus on an operational approach to address the theft of copper cable. This co-operative working agreement is further accentuated in SAPS Circular 2/28/23 of 2011 (par.3) (SAPS, 2011), as set out in para. 2.5.2, mandating the NFMCCC to address the theft of non-ferrous metals actively by:

- Establishing and maintaining an NFMCCC to address theft and related crimes pertaining to non-ferrous metals.
- Implementing a joint venture between the relevant stakeholders to effectively address crime pertaining to non-ferrous metals on a national and provincial level; and
- Co-ordinating integrated crime combating operations that focus on the suppliers/dealers and end-users.

Arendse (2010:39), as discussed in para. 3.1 confirms that the NFMCCC must identify trends, give strategic guidance and co-ordinate operations. The following NFMCCC strategic objectives, as mentioned in para. 3.3.1, further clarify the Committee's expected multi-faceted co-operative relationships, interaction and working agreements with stakeholders:

- Strategic Objective 1: Led by NFMCCC assisted by NICOC co-ordinate and consolidate government's effort in combating theft and illicit trade in ferrous and non-ferrous metals in partnership with affected industries.
- Strategic Objective 2: All role-players co-ordinated/monitored by NFMCCC (no executive authority). Mitigate theft and illicit trade in ferrous and non-ferrous metals across the illicit value chain (detect, prevent, combat, investigate and prosecute)
- Strategic Objective 3: South African Revenue Protection Association (SARPA) and the involvement of DIRCO to be strengthened Regional and international co-operation to combat infrastructure-related crimes.

It became evident from the in-depth interviews with BACSA participants that the relationship between the NFMCCC and other role-players is not always sound and trustworthy, especially during information-driven operations. Participants were further of the opinion that the SAPS are not always present. Participants suggested this relationship has deteriorated because of factors, such as budgetary limitations and changes to legislation. Another participant pointed out that the new legislation placed limitations on the interaction and working relationships between SAPS and other role-players.

Moreover, participants agreed that although statistics are available, no real co-operative and co-ordinated intervention strategies were planned based on threat analysis information. One participant acknowledged the registering of statistics but questioned the sharing of information and how information is acted upon to inform new co-ordinated operational strategies to address non-ferrous metal-related crimes.

The responses further suggested that stakeholders co-operate with the local SAPS and parastatals since they are more supportive than the NFMCCC regarding strategies based on threat analysis. In agreement, another participant confirmed that parastatals are more supportive in implementing co-operative interventions based on crime threat analysis, though these interventions do not always result in success.

### **5.3.5 Theme 5: Additional external operational challenges to the NFMCCC and its copper theft prevention aim**

From the literature presented in para. 2.1, copper cable theft is indeed a national crisis, while Michael, the DA Spokesperson on Public Enterprises (2012:1), similarly argued that the time has come to take serious action to stop copper cable theft. Bindeman (2011:3), as discussed in para. 2.1 proposes stricter control measures and prosecution based on economic sabotage for copper cable theft and stricter control on exports.

Participants identified additional external challenges that face the NFMCCC. These challenges include the following: the difficulty of identifying the owner of copper cabling once perpetrators have burnt the outer plastic casing to expose the copper; and the involvement of foreign nationals (these foreign nationals are abused by drug dealers who accept copper cable as payment for drug purchases); informal, illegal trading of

copper; the excessive number of copper theft cases withdrawn; and copper theft increases during electricity outages (which are becoming more common in South Africa).

### **5.3.6 Theme 6: The operationalisation of the NFMCCC in an integrated manner**

It emerged from the in-depth interviews that participants are positive about the existence of the NFMCCC; however, the functional operation and co-ordination of this Forum has several challenges that relate to challenges identified in Theme 3. Due to the lack of arresting powers, parastatal find themselves in a difficult position during operations co-ordinated by the NFMCCC. The SAPS are not always present at crime scenes, and an obvious lack of training at station level exists surrounding the mandates and legislation. Participants further expressed that the functional relationships between the NFMCCC and other stakeholders are not optimal and should be re-evaluated. In addition, it appears that the SAPS do not have dedicated members to address non-ferrous metals-related crimes. The lack of sufficient training by the NFMCCC once again emerged as a theme. One participant stressed that certain SAPS members are not familiar with the procedures to follow in non-ferrous metals-related crimes.

## **5.4 SAMPLE GROUP C – CPI PRIVATE INVESTIGATORS**

### **5.4.1 Theme 1: CPI participant perceptions of the aims and objectives of the NFMCCC**

The SAPS Annual Report of 2014/2015 (SAPS, 2015:156), as noted in para. 1.3, identifies the following NFMCCC aims and objectives (SAPS is responsible for the Second-Hand Goods Control Section):

- Maintaining governance in co-operation with SAPS Legal Services.
- Maintaining National and Provincial NFMCCCs.
- Maintaining mechanisms, such as training for the effective identification of non-ferrous metals.
- Sustaining an integrated approach between relevant stakeholders.
- Co-ordinating compliance, as well as crime combating operations.
- Monitoring the import and export of non-ferrous metal.

- Monitoring investigations pertaining to non-ferrous metals-related crimes.
- Maintaining fixed structures on national and provincial levels and conducting a non-ferrous metals analysis to determine crime threat tendencies.

In addition, the purpose of the Second-Hand Goods Control Act 6 of 2009, as confirmed in para. 2.4.2 is to regulate second-hand goods dealers and pawnbrokers to combat trade in stolen goods (copper cable); to promote ethical standards in the second-hand goods trade and provide for matters connected therewith. This Act thus sets the foundation for the aims and objectives of the NFMCCC. Arendse (2010:39), as mentioned in para. 3.1, describes the NFMCCC as a Forum identifying trends, giving strategic guidance and co-ordinating operations concerning non-ferrous metals crimes.

Participants made strong statements that the aims and objectives of the NFMCCC are not upheld due to a lack of proper communication and training which should be integrated with the new laws on copper cable theft in South Africa. The participants' responses further indicate that the co-ordination of prevention initiatives by the NFMCCC is not always effective, particularly during major operations. It also emerged that parastatals are left without support from the SAPS due to internal power struggles.

#### **5.4.2 Theme 2: Participant perceptions of the NFMCCC achieving its aims and objectives to combat copper cable theft**

The magnitude of copper cable theft in South Africa and the impact on the economy, electricity supply, transport, telecommunications, health services, agriculture, and productivity, as discussed in para. 2.2, suggests the NFMCCC experiences challenges in achieving its aims and objectives regarding the combating copper cable theft.

Participants perceived the NFMCCC as partially successful in achieving its aims. Participants ascribed this partial success to the NFMCCC, focusing on easier targets instead of copper cable theft and effective management. Another participant was sceptical about the NFMCCC, explaining that it only partially achieves success because it focusses on petty criminals instead of organized syndicates.

Participants indicated mixed feelings about the NFMCCC attaining their goal and objectives, ranging from a clear *no* to being *uncertain* and/or acknowledging it as



*partially successful*. It emerged from the in-depth interviews with CPI participants that the NFMCCC does not achieve its aims and objectives to combat copper cable theft. It appears that NFMCCC meetings only focus on non-ferrous metals crime statistics; however, no action is taken to address this crime collectively.

#### **5.4.3 Theme 3: Engagement in multi-faceted co-operative relationships, interaction and working agreement with stakeholders to facilitate and sustain policing strategies to combat copper cable theft**

According to SAPS Circular 2/28/23 of 2011 (par.3) (SAPS, 2011b) and para. 2.2.5, one of the responsibilities of the NFMCCC is to actively address the theft of non-ferrous metals by implementing joint ventures between the relevant stakeholders to address the crime on a national and provincial level effectively. Moreover, Bindeman (2013:1), as discussed in para. 2.2.5, confirms the NFMCCC involves role-players such as the SAPS, BACSA, state-owned entities such as Eskom, Transnet and the JSE-listed telecommunication group Telkom, Metrorail, mines, municipalities, and representatives from many government departments.

The strategic objectives of the NFMCCC, as discussed in para. 3.3.1, stipulate partnerships with role-players and co-ordination and co-operation in combating theft and illicit trade in ferrous and non-ferrous metals.

From the CPI participant views, as discussed in chapter four, it appears that the existing NFMCCC structure is primarily used for discussion and interaction, but doubt was expressed as to whether planning and implementation occur according to clear aims and objectives within the Forum. Participants opined a lack of structured results-driven working agreements incorporating timeframes. One participant acknowledged that the NFMCCC performs operations resulting in successes; however, was further of the opinion that more should be achieved given the structure of the NFMCCC.

#### **5.4.4 Theme 4: The nature of the strategies planned for achieving the goal**

As stated in para. 1.2, the SAPS, which is the custodian of law and order, must follow a holistic approach whereby governmental and private stakeholders co-operate and identify policing strategies to address copper theft. According to SAPS Circular 2/28/23

of 2011 (par.3) (SAPS, 2011b), as discussed in para. 1.3, one of the NFMCCC's responsibilities is to actively address non-ferrous metal theft by launching and implementing a non-ferrous metal anti-crime communication plan and strategy, including educational awareness campaigns. The SAPS Annual Report of 2014/2015 (SAPS, 2015:158), as mentioned in para. 1.3 confirms that intelligence-driven operations have been initiated in all provinces in order to combat non-ferrous metal-related crimes.

Philip (2014:1), as noted in para. 3.1, posits that one strategy to curb copper cable theft is to paint or spray barely visible micro-dots onto both copper cable and steel infrastructure that will allow the police (and parastatals) to identify cable as stolen and instantly identify its owner. In addition, Van Dalen (2017:2), as per para. 3.1 argues that a proper strategy must include all role-players in the investigation and prosecution of suspects, who must work together to ensure effective and efficient processes. Goosen, (2017:1), as mentioned in para. 3.1, further suggests that an alternative strategy to prevent copper cable theft is the use of geospatial intelligence (GEOINT) analysis software systems implemented to support operational strategies in countering copper cable theft in the central Gauteng region of South Africa. Van Dalen (2017:2) believes that any concrete strategic plan would be challenged by the number of voices and opinions currently involved in the issue but that the time has passed where the SAPS owns crime prevention, and he calls for the public (partnership policing) to assist in the prevention of copper cable theft.

Some participants believed that there are no clear strategies by the NFMCCC to address copper cable theft, although some believe that there are strategies put in place but are doubtful whether those strategies are being managed effectively. One participant believed the NFMCCC has no transparent strategy to address non-ferrous metal-related crimes. This participant suggested a governing body, training interventions to upskill inexperienced members, and intelligence-driven strategies as a partial solution. Another participant opined that the responsibility of the NFMCCC is to facilitate information gathering and sharing among all role-players with an emphasis on ensuring that available information is sufficiently acted upon. One participant was confident that the NFMCCC has strategies in place; however, he suggested that strategies be managed effectively. One participant suggested that SAPS members responsible for enforcing the Second-Hand Goods Control Act 6 of 2009 should be

rotated since they become complacent and merely strive to meet site inspection targets.

Another participant cautioned of corrupt activities among SAPS members responsible for enforcing the Second-Hand Goods Control Act 6 of 2009 suggesting that the relationships between officers and second-hand dealers tend to become too friendly creating an environment for corruption. One participant viewed the application of strategies implemented by the NFMCCC from a legislative perspective. This participant emphasised challenges from implementing new legislation among members of the police and members of the NPA. Participants illustrated that they do not clearly understand what happens to crime statistics or how they are analysed and implemented operationally. Participants were further concerned about the statistical timeframes which are not always practical when used for information-driven operations. Participants were negative about adopted strategies based on evaluating statistics that are not appropriately planned or communicated effectively. One participant described the NFMCCC meeting as a “...*statistical nightmare*...” and expressed reservations whether the NFMCCC sufficiently analyses the crime statistics on copper cable theft to ascertain the impact of implemented strategies.

Another participant suggested that the NFMCCC does not provide sufficient guidelines to evaluate the impact of implemented strategies resulting in solutions being aimless or implemented with uncertainty.

One participant cast doubt on police officers’ knowledge and ability to conduct threat analysis and further questioned their ability to implement strategies. This participant also emphasised the significance of support and expertise provided by specialised units.

Another participant confirmed that intelligence-driven operations are conducted by SAPS, acknowledging that these kinds of operations impact on copper cable theft. This participant further stressed the importance of timeous crime information which assists with successful operations.

Interestingly, another participant believed SAPS is manipulating the crime statistics, thus, creating a skewed picture of the reality.

**5.4.5 Theme 5: Effective strategy implies knowledge of the crime, product, and legal matters**

As confirmed in para. 2.4.2, the Second-Hand Goods Control Act 6 of 2009 was enacted to regulate second-hand goods dealers and pawnbrokers, to combat trade in stolen goods (including copper); to promote ethical standards in the second-hand goods trade, and to provide for matters connected therewith. Furthermore, SAPS Circular 2/28/23 of 2011 (par.3) (SAPS, 2011b), as discussed in para. 2.5.2, emphasises some of the responsibilities of the NFMCCC including actively addressing the theft of non-ferrous metals and monitoring investigations pertaining to non-ferrous metal-related crimes and establishing mechanisms (training interventions) for the practical identification of non-ferrous by law enforcement officers.

The participants argued an apparent lack of forensic investigators with the necessary knowledge of copper cable theft investigations. Another participant suggested that a dedicated SAPS unit should be established to address copper cable theft. In addition, this participant recognised the lack of linkage between related cases as a shortcoming. One participant regarded the private security industries restricted mandate as an impediment to copper cable theft prevention. Another participant viewed the efficient gathering and management of crime information as crucial and identified ill-informed role-players (especially relating to implementing applicable legislation) as a shortcoming.

**5.4.6 Theme 6: Participant perceptions of the NFMCCC continuously developing and implementing strategies to address identified shortcomings or to improve on existing strategies**

The SAPS Annual Report of 2014/2015 (SAPS, 2015:158), as discussed in para. 1.3 states that intelligence-driven operations have been introduced in all provinces to reduce copper cable theft in South Africa. Further, SAPS has created and maintained structures on a national and provincial level to conduct non-ferrous metals analysis to determine crime threat tendencies.

Michael (2012:1), the DA Spokesperson on Public Enterprises, as mentioned in para. 2.1, advocates that the time has come to take serious action to stop copper cable theft and secure national assets (including critical infrastructure reliant on copper), which ensure daily life necessities. He cites as examples of assets essential services like telecommunication, electricity, and transport. Furthermore, the SAPS Strategic Plan 2014-2019:17 (SAPS, 2019), as noted in para. 2.5.1, regulates the investigation of the theft of environmental assets and natural resources, namely, theft of non-ferrous metals, and mandates a pro-active approach to policing.

Participants expressed an overall lack of commitment from leadership for the NFMCCC's strategies to address identified shortcomings or improve existing approaches.

#### **5.4.7 Theme 7: The need for co-ordination of integrated strategies**

The SAPS Annual Report of 2014/2015 (SAPS, 2015:156), as discussed in para. 1.3, highlights that the SAPS Second-Hand Goods Control Section, which is the custodian of the NFMCCC, is responsible for sustaining an integrated approach between relevant stakeholders. However, as mentioned in para. 1.3, and from the researcher's extensive experience in copper theft investigations, a significant shortcoming in the policing of copper theft is that the SAPS and all other stakeholders that form part of the NFMCCC address copper theft in isolation and do not holistically engage with other stakeholders in the copper industry to identify policing strategies to curb copper theft. As a result, the SAPS, and stakeholders in the copper industry work in silos resulting in non-sharing of crime information, crucial evidence being lost, and being unaware of similar cases that could be linked. Van Dalen (2017), as noted in para. 1.3, further points to the outcome of a Commission of Enquiry and Task Team on Copper Theft stating that copper theft should be addressed immediately using a focused approach.

In addition, SAPS Circular 2/28/23 of 2011 (par.3) (SAPS, 2011b), as referenced in para. 2.5.2, mandates the NFMCCC to actively address the theft of non-ferrous metals, highlighting the implementation of a joint venture between the relevant stakeholders to effectively address crime pertaining to non-ferrous metals on a national and provincial level, and the importance of co-ordinated integrated crime combating operations that focus on the suppliers/dealers and end-users.

Participants acknowledged the sharing of information at NFMCCC meetings; however, opine that information is primarily restricted to non-ferrous metals-related crime statistics, and not on developing an integrated strategy that is critically needed.

**5.4.8 Theme 8: Operational relationship between the NFMCCC and other stakeholders**

The SAPS Circular 2/28/23 of 2011 (par.3), as mentioned in para. 2.5.2, prescribes that the NFMCCC must implement a joint venture between the relevant stakeholders to effectively address crime relating to non-ferrous metals on a national and provincial level.

It appeared from discussions with participants that the operational relationship between the NFMCCC and other stakeholders was either *passive, not so good or effective to a certain extent*, depending on the region or the specific provincial NFMCCC representative. Participants' opine that SAPS members are not familiar with the Criminal Matters Amendment Act and its effect on copper cable theft, which has led to a power-play between the SAPS and the parastatals.

**5.4.9 Theme 9: Factors hindering the successful implementation of policing strategies implemented by the NFMCCC to address copper cable theft**

Participants identified an array of shortcomings in terms of staff available to address copper cable theft efficiently. These shortcomings include a lack of trained and committed SAPS members, which negatively influences information-driven operations to combat copper cable theft in South Africa. Power struggles between certain role-players were also identified as problematic. All participants further identified a lack of training as having a negative effect on the combatting of copper cable in South Africa. In addition, participants made it clear that there is a lack of proper communication before, during and after information-driven operations in relation to copper theft.

Although information sharing is a primary objective for co-operation, and the NFMCCC provides the opportunity to share information, there were concerns from some participants that information sharing does not go beyond taking note of crime statistics and that members are hesitant to share crucial information about operations. Others

are positive about the opportunity to share information but still express concern over its practical implementation.

It further appeared that because of poor communication of crime information and data, (specifically in covert operations) and mistrust between the relevant role-players, effective information-driven operations are challenging to plan and execute.

#### **5.4.10 Theme 10: The NFMCCC monitoring and co-ordinating crime combating operations in an integrated manner**

According to Bindeman (2013:1), as per para. 2.5.2, the NFMCCC holds national and provincial meetings aimed at preventing non-ferrous metal thefts across South Africa. These meetings are currently also conducted quarterly at the station level, proving the SAPS's commitment to stopping non-ferrous metal theft. According to the SAPS Circular 2/28/23 of 2011 (par.3) (SAPS, 2011b), as per para. 2.5.2, the NFMCCC is responsible for co-ordinating integrated crime combating operations that focus on the suppliers/dealers and end-users.

Some participants were pessimistic about the integration of crime operations, while others acknowledged that the NFMCCC serves to integrate information from different stakeholders, but those operations are not managed in an integrated manner. The majority of participants had a negative perception surrounding the co-ordination of operations by the NFMCCC.

### **5.5 SAMPLE GROUP D – MPUMALANGA AND GAUTENG PROVINCIAL NFMCCC**

#### **5.5.1 Theme 1: Participant perceptions of the aims and objectives of the NFMCCC**

The SAPS Annual Report of 2016/2017 (SAPS, 2017:122), as referred to in para. 1.2, stipulates that Second-Hand Goods Dealers Forums have been established in majority policing areas to reduce property-related crimes through information sharing and serve as a platform to establish good co-operation and communication between the SAPS and the second-hand goods industry. Moreover, the SAPS Annual Report of 2014/2015 (SAPS, 2015:156), discussed in para. 1.3, further illustrates some of the

SAPS Second-Hand Goods Control Section's responsibilities, namely, monitoring investigations concerning non-ferrous metals-related crimes, and maintaining fixed structures on national and provincial levels and conducting a non-ferrous metals analysis to determine crime threat tendencies.

Moreover, the strategic objectives of the NFMCCC, as illustrated in para. 3.3.1, stipulate that the Forum should co-ordinate and consolidate the government's effort in combating theft and illicit trade in ferrous and non-ferrous metals in partnership with affected industries. In addition, the NFMCCC is to co-ordinate and monitor all role-players to mitigate theft and illicit trade in ferrous and non-ferrous metals across the illicit value chain.

Sample group D confirmed ineffective co-operation between SAPS and relevant enterprises in the fight against copper cable theft.

#### **5.5.2 Theme 2: Negative or doubtful that the Forum achieve its aims and objectives**

As stated in the SAPS Annual Report of 2014/2015 (SAPS, 2015:158), which is referred to in para. 1.3, an increase of non-ferrous metals-related crimes has raised concerns about its impact on South Africa's economy, society, and critical infrastructure which, in particular, impact various industries, including local government, energy, transport and mining. The theft of non-ferrous metals, copper, and aluminium is further emphasised by Van den Berg (2007) as discussed in para. 1.3, who states that non-ferrous metal theft had escalated to such an extent that losses run into millions of Rand annually. These concerns raise the question of whether the NFMCCC is achieving its aims and objectives.

The majority of participants believed that the NFMCCC currently does not achieve its aims and objectives.



### **5.5.3 Theme 3: Perceptions of planned intervention strategies of the NFMCCC to combat copper cable theft in South Africa**

As stated by Arendse (2010:39), in para. 3.1, the NFMCCC identifies trends, gives strategic guidance and co-ordinates operations. The strategic objectives of the NFMCCC further require consultation and communication with stakeholders.

It arose from discussions with participants that the NFMCCC planned intervention strategies to combat copper cable theft in South Africa are not consulted at all levels, particularly not at the grass-roots level.

### **5.5.4 Theme 4: NFMCCC's engagement in multi-faceted cooperative relationships, interaction and working agreements with stakeholders**

The SAPS Annual Report of 2014/2015 (SAPS, 2015:156), as presented in para. 1.3, emphasises that the SAPS Second-Hand Goods Control Section, which is the custodian of the NFMCCC, is responsible for sustaining an integrated approach between stakeholders to address non-ferrous metal crimes. Moreover, the strategic objectives, as per para. 3.1, further emphasise that the NFMCCC should co-ordinate and monitor all role-players to mitigate theft and illicit trade in ferrous and non-ferrous metals.

The participants believed that there is a good working relationship from time to time, specifically in the hotspot areas. However, they advised that the strategy be revisited and include a memorandum of understanding to improve communication in the multi-faceted interaction with stakeholders. Participants also indicated positive, co-operative relationships, but were overall referring to monthly meetings where information is shared, and sometimes planning occurs.

Another participant acknowledged relationships and/or agreements in the NFMCCC; however, he questioned the implementation of strategies: *"The link is there, but the plans and the execution to get to the strategies and the goals are not there."*

### **5.5.5 Theme 5: Diverse experiences of operational relationships between the NFMCCC and other stakeholders**

The importance of implementing and maintaining operational relationships between the NFMCCC and other stakeholders has been emphasised in paras. 1.2; 2.5.1; 2.5.2; and 3.1.

Linking to the previous theme, participants elaborated on the relationship between the NFMCCC and other stakeholders. Although positive responses emerged about the relationship and interactions between NFMCCC members represented at the Forum meetings, the operational relationships and execution thereof were experienced as ineffective by some participants.

Participant also highlighted the lack of operational relationships between the NFMCCC and other stakeholders at the grass-roots level. These participants highlighted disagreements between SAPS and stakeholders as a primary factor inhibiting the success of the NFMCCC.

### **5.5.6 Theme 6: Factors that hinder the successful implementation of policing strategies implemented by the NFMCCC**

The strategic objectives of the NFMCCC (specifically to implement efficient policing strategies to combat copper cable theft) have been illustrated in paras. 2.5.2 and 3.3.1. Moreover, challenges that exist to address copper cable theft effectively are demonstrated in paras. 2.2.1, and 3.3.

From discussions with participants, a lack of persistence and trustworthiness between stakeholders and the SAPS and power struggles influence the successful implementation of policing strategies implemented by the NFMCCC. However, various participants made it clear that they attempt to implement new ideas to enhance the effectiveness of policing strategies with a pro-active approach to preventing copper cable theft in South Africa. Participants indicated that the mandate of the NFMCCC, who functions under the SAPS Division Visible Policing is not always clear to the detectives, because the SAPS Visible Policing Division regards their mandate as ensuring compliance in terms of sec. 28(1) of the Second-Hand Goods Act 6 of 2009, but detectives do not usually see copper cable theft as their priority.

Participants were further of the opinion that the absence of senior officers and senior personnel to serve on the NFMCCC and too many other tasks cause a lack of commitment and distraction from the focus of combating copper cable theft.

Additionally, all participants acknowledge the importance of sharing crime information using formal procedures, but diverse responses emerged regarding what this entails and the exact procedures to follow. A recurrent theme that emerged during the in-depth interviews is that the Forum provides an opportunity to share statistical information about copper cable crime-related incidents; however, the information is not used to plan or evaluate specific strategic interventions. Some participants argued a lack of trust between the Forum members and a fear that corrupt officials will leak information.

Another participant summarised his perception concerning the lack of shared crime information related to copper theft: *“The effect of not sharing is a matter of the left arm doesn’t know what the right arm is doing, and it will have a negative impact on eventually apprehended suspects as well as successful prosecution.”* Participants further concur that copper-related crime information is only shared on a need-to-know basis by the NFMCCC and only to top management due to mistrust and corruption internally and externally. Participants also referred to a lack of competent/knowledgeable SAPS members and a lack of investigation vehicles as issues that prevent successful operations.

**5.5.7 Theme 7: Perceptions on the NFMCCC’s continuous evaluation and adaption, development, and implementation of strategies to address identified shortcomings to improve on existing strategies**

The monitoring of investigations pertaining to non-ferrous metals-related crimes and conducting a non-ferrous metals analysis to determine crime threat tendencies by the SAPS Second-Hand Goods Control Section is confirmed in the SAPS Annual Report of 2014/2015 (SAPS, 2015:156), and mentioned in para. 1.3.

Participants had diverse perceptions of whether the NFMCCC continuously evaluates, adapts, develops, and implements strategies to address identified shortcomings or improve existing strategies. It emerged from the interviews that feedback is done at

the NFMCCC meetings, but that the focus is on statistics, but not on the conviction rate of copper cable theft in South Africa: *“Feedback is done on the monthly meetings. Another problem that is experienced is that there are always different representatives from the different entities attending the meetings. There is not a continuous flow of processes every month.”* However, some participants indicated an evaluation of policing strategies and demonstrated that they are looking at new strategies specifically in Mpumalanga, which will be based on incident rates.

Other participants believed that crime threat analysis to determine copper cable theft trends and subsequent action by the NFMCCC’s was the responsibility of Crime Intelligence (CI). Comparisons are then shared at the NFMCCC meetings.

One participant thought that proper evaluation and adaptation of strategies is not happening since crime information and data are often outdated because meetings occur only once per month.

#### **5.5.8 Theme 8: NFMCCC’s monitoring and co-ordinating of crime combating operations**

The NFMCCC’s responsibility to monitor and co-ordinate crime combating operations has been illustrated in para. 2.5.2 and 3.3.1.

From the interviews conducted it appears as if the NFMCCC does not always monitor and co-ordinate crime combating operations and often leaves it to the parastatals who do not have the power to arrest resulting in conflicts between the stakeholders and the SAPS.

There was a general uncertainty among participants about the NFMCCC’s monitoring and co-ordination of operations and queries as to the SAPS mandate in this regard.

#### **5.5.9 Theme 9: Perceptions about an efficient link between NFMCCC, police stations, government departments and other stakeholders**

The responsibility of implementing and sustaining multi-faceted co-operative relationships, interaction and working agreements with stakeholders by the NFMCCC is emphasised in para. 1.2, 2.5.1, 2.5.2 and 3.3.1.

It transpired from the interviews with participants that a link exists between the NFMCCC, police stations, government departments and other stakeholders; however, it is not optimally utilised.

#### **5.5.10 Theme 10: Functionality of the NFMCCC**

The following functions of the SAPS Second-Hand Goods Control Section (custodian of the NFMCCC) are stipulated in the SAPS Annual Report of 2014/2015 (SAPS, 2015:156) discussed in para. 1.2:

- Maintaining governance in co-operation with SAPS Legal Services.
- Maintaining National and Provincial NFMCCCs.
- Maintaining mechanisms, such as training for the effective identification of non-ferrous metals.
- Sustaining an integrated approach between relevant stakeholders.
- Co-ordinating compliance and crime combating operations.
- Monitoring the import and export of non-ferrous metal.
- Monitoring investigations pertaining to non-ferrous metals-related crimes.
- Maintaining fixed structures on national and provincial levels and conducting a non-ferrous metals analysis to determine crime threat tendencies.

The overall perception of participants was that the NFMCCC was partially functional. The Forum serves as a platform for information sharing and networking with external stakeholders, but the operational part is ineffective, which results in shortcomings as previously discussed in earlier chapters.

## **5.6 SUMMARY**

This chapter interpreted the research findings from the in-depth interviews conducted with awaiting trial detainees charged with copper theft incidents at Pollsmoor Correctional Centre, Western Cape; Mpumalanga Provincial NFMCCC and Gauteng Provincial NFMCCC, BACSA, and CPI, respectively. A summary of the literature perused in chapter one to three, was presented. The research findings were classified into the themes as categorised in chapter four. The interview results were condensed, and the research findings and literature revealed the impact of the NFMCCC on the combating of copper cable theft in South Africa (or the lack thereof in some cases).

Chapter six recaps chapters one to five, and the pertinent issues are applied to reach conclusions. Recommendations will be made concerning the critical research findings highlighting the value and importance of a systematic pro-active plan that presents practical solutions for copper cable theft in South Africa.

## **CHAPTER 6**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **6.1 INTRODUCTION**

This chapter commences with a summation of chapters one to five, after which the interpretations from chapter five are considered, and inferences presented. Consequently, recommendations will be formulated based on the key findings from the themes and sub-themes explored in chapter four to contribute to the body of knowledge about the combating of copper cable theft.

Recommendations made in this chapter could contribute to the mitigation of copper cable theft in South Africa. This study is significant because it explores the NFMCCC's impact on copper cable theft and provides recommendations to enhance its functional capacity. Consequently, a systematic pro-active plan for the reduction of copper cable theft in South Africa is proposed. This plan realistically presents real-world answers to reduce copper cable theft and thus advances the current knowledge on copper cable theft in South Africa.

#### **6.2 A SYNOPSIS OF THE FOREGOING CHAPTERS**

Chapter one presented the study's general orientation, set out the methodological parameters, and began introducing the study. The identified problem statement paved the way for the subsequent research aim, namely, to evaluate the impact of the NFMCCC on the combating of copper cable theft in South Africa. The objectives of the study which originated from the research problem and research aim then followed.

The aim of this study was achieved; namely, to evaluate the impact of the NFMCCC on the combating of copper cable theft, with the purpose of:

- Describing the extent and impact of copper cable theft in South Africa.
- Describing the impact of the NFMCCC on the combating of copper cable theft.
- Exploring the co-operation between government and industry stakeholders - who form part of the NFMCCC - to combat copper cable theft.
- Investigating factors that hinder the implementation of effective policing strategies to address copper cable theft.

- Examining the current policing strategies to address copper cable theft.
- Examining international best practices to address copper cable theft.

The following research question was resolved in this study:

*What is the impact of the NFMCCC on the combating of copper cable theft?*

The following additional research questions were formulated and answered in this study:

- What is the extent and impact of copper cable theft in South Africa?
- Is the NFMCCC effective in addressing copper cable theft?
- Do government and industry stakeholders - who form part of the NFMCCC - efficiently engage in co-operative relationships to combat copper cable theft?
- What factors hinder the implementation of effective policing strategies to address copper cable theft?
- What policing strategies are currently implemented to address copper cable theft?
- Could current policing strategies that address copper cable theft be enhanced?
- What international best practices address copper cable theft?

The researcher explored the views of awaiting trial detainees charged with incidents of theft (of copper) at Pollsmoor Correctional Centre in the Western Cape; representatives from Mpumalanga Provincial and Gauteng Provincial NFMCCC, representatives from BACSA, and CPI. In-depth interviews were conducted with these participants. The chapter also clarified the crucial theoretical terminology used in this study. The methodological parameters were delineated and included an outline of the study's explorative nature, the research approach and design, data collection and analysis methods, ethical considerations, and the procedures followed to guarantee trustworthiness.

Chapter two offered a comprehensive overview of the magnitude of copper cable theft in South Africa. The chapter then highlighted the impact of copper cable theft in South Africa, paying specific attention to the economy, transportation, telecommunication,



agriculture, electricity supply, and critical infrastructure. A discussion of copper cable theft globally then followed, highlighting copper cable theft trends in specific countries.

Chapter three commenced with a presentation of legislation focusing on the most prominent legislation governing copper cable theft in South Africa. Prominent role-players in the combating of copper cable theft in South Africa were furthermore identified. The chapter concluded by presenting various strategies implemented by selected international jurisdictions to prevent copper cable theft that could act as best practices in addressing the research problem.

Chapter four theorised the participants' experiences and opinions and permitted the reader to gain rich insight into the collected data originating from the in-depth interviews. Tendencies and patterns were categorised through themes and sub-themes that developed from the detailed interviews. Direct verbatim quotations were used to demonstrate the participants' responses to the themes and sub-themes.

Chapter five dealt with the interpretation of the results presented in chapter four. The basis of this chapter was the themes and sub-themes that originated during the in-depth interviews. As discussed in chapter four, each theme was presented and reinforced with the literature from chapters one to three to evaluate the impact of the NFMCCC on combating copper cable theft in South Africa.

### **6.3 RECOMMENDATIONS**

Copper cable theft has created profound safety, economic and service delivery challenges for all sectors in South Africa. The analysis and interpretation of research findings revealed that the NFMCCC has numerous shortcomings and faces various challenges which influence its ability to address copper cable theft. The researcher proposes a systematic pro-active plan to reduce copper cable theft in South Africa. The recommendations are founded on in-depth interviews with research participants and national and international literature reviewed earlier in the study. In addition, the successes and shortcomings of theft reduction programmes implemented in the USA, UK, France, Italy, Germany, and Bulgaria as a response to copper cable theft were explored and may serve as best practices for South Africa.

These recommendations could be considered for implementation in other countries; however, they should be adapted according to each countries' particular situation. Each of the suggested theft mitigation measures should be evaluated and validated before implementation. Best practices implemented in the USA, UK, France, Italy, Germany, and Bulgaria to mitigate copper cable theft have proven that this phenomenon typically requires a combination of measures to be efficient. Sharing best practices and crime information, and collaboration among law enforcement and the various affected role-players is essential to mitigate copper cable theft.

### **6.3.1 Recommendations for the South African Police Service**

- i. A specialised police unit with the sole mandate to mitigate and investigate copper cable theft could produce better outcomes for combating this crime, rather than a generalised approach. Such a unit could enhance responsiveness and effectiveness in dealing with copper cable theft. It is recommended that the NFMCCC should be replaced with a specialised SAPS Non-Ferrous Metals Theft Unit that could reduce copper cable theft. Consequently, this unit could dedicate its time and resources to the mitigation of copper cable theft. The mitigation of copper cable theft should be based on pro-active measures.
- ii. These pro-active measures should be based on intelligence-led policing by establishing active informer networks, efficient copper theft crime analysis and the timeous communication and sharing of crime information. Subsequently, the SAPS Non-Ferrous Metal Theft Unit could act pro-actively to identify copper cable thieves and prevent these crimes. Currently, the SAPS do not utilise crime intelligence to its fullest potential to inform a precise and efficient intelligence-led approach to address copper cable theft, but mainly follow a reactive approach to police copper cable theft. Copper cable thieves and syndicates have become ever more organised in their criminal behaviour, necessitating that the police act strategically and in an effective and well-organised manner. Thus, it is further suggested that copper cable theft be addressed using pro-active gathering and analysis of crime information.
- iii. Intelligence analysis and co-ordination of copper cable theft incidents should be enhanced. Analysis of intelligence should focus on outcomes, such as criminal and behavioural analysis, risk factors and risk assessments, and escalation patterns to

mitigate copper cable theft, emphasising prevention. The enhancement of intelligence analysis would enable the identification of *modus operandi*.

- iv. Strategic partnerships between the police and all role-players should be revitalised. Joint ventures between the proposed SAPS Non-Ferrous Metal Theft Unit, various industry sectors affected by copper cable theft and private security should be increased and strengthened. The Italian government developed an innovative and co-operative programme involving a selection of the principal role-players in their attempt to mitigate copper theft. The National Monitoring Centre on Copper Theft was founded in Italy and was intended to improve collaboration among law enforcement bodies and the organisations usually subjected to copper theft. The UK created a National Metal Theft Task Force and designated the BTP as the lead agency. These initiatives are relatively similar to South Africa's NFMCCC. However, it is recommended that a theft monitoring system - under the guardianship of the proposed SAPS Non-Ferrous Metal Theft Unit - be introduced to improve collaboration and information-sharing among the relevant role-players. Industry sectors affected by copper cable theft and private security companies are valuable sources of information. Consequently, effective, and efficient co-operation between the proposed SAPS Non-Ferrous Metal Theft Unit and the affected industry sectors could enhance their impact on copper cable theft through intelligence-led interventions.
- v. Implementing a specialised SAPS Non-Ferrous Metal Theft Unit, and substituting the NFMCCC, could more effectively build and enhance collaborative relationships, enhance information sharing between role-players, and operationalise initiatives to address non-ferrous metal-related crime. Ultimately, improved information sharing could improve the detection of copper cable theft incidents, catalysing the overall reduction of copper theft.
- vi. A SAPS Non-Ferrous Metal Theft Unit exclusively mandated to prevent and investigate copper cable theft would be better positioned to intensify copper cable crime combating operations in collaboration with relevant entities affected by copper cable theft and private security organisations.
- vii. Relevant role-players should be educated on the legislation governing copper cable theft. SAPS members and the proposed SAPS Non-Ferrous Metal Theft Unit should undergo regular refresher training that addresses all relevant legislation governing copper cable theft. Continuous training would empower the members to

keep up to date with specific laws and ensure that they understand legislative aspects relating to copper cable theft.

- viii. The proposed SAPS Non-Ferrous Metal Theft Unit should conduct intensified intelligence-led operations at scrap metal dealers. These operations would identify corrupt scrap dealers and afford legitimate dealers an opportunity to educate themselves about their industry's relevant legislation.
- ix. The SAPS Non-Ferrous Metal Theft Unit should be resourced and capacitated to optimise copper cable theft prevention and investigation. Expanding the capacity and professionalism of the Unit should be a SAPS priority.

### **6.3.2 Recommendations for utility companies on hardening copper cable theft targets**

Utility companies significantly impacted by copper cable theft, such as PRASA, Telkom, and Eskom should apply unique markings to their copper cables using innovative identification methods. The use of nanotechnology, for example, micro-dotting<sup>4</sup> would, simplify the identification of company-owned copper cables, assist in the recovery of copper cables, support the police with convictions, lessen the incentive to buy stolen copper cables and make it increasingly difficult for copper thieves to sell the stolen copper.

These utility companies could, in addition to the above measures, implement target hardening measures to mitigate copper cable theft further:

- Install detection, alarm and surveillance systems that persistently monitor high risk and remote sites in real-time. Surveillance systems are currently used with remarkable success by the private security company, CPI. These systems create instant alerts to police and private security companies when a trespasser is detected and enable rapid response to apprehend copper thieves. Other target hardening measures that could be considered and intensified are infrared detectors and security cameras, roaming security patrols, and copper substitutes where

---

<sup>4</sup> A process whereby numerous microscopic dots is sprayed on different places of a particular surface leaving permanent marks on the surface. Microdots can only be detected by means of specialised equipment such as an ultraviolet light and magnifier lamp.

possible (for example, copperweld<sup>5</sup>). Replacement products, such as copperweld, would prevent copper cable thieves from profiting from copper's high-value. However, utility companies should advise prospective copper cable thieves through media campaigns of the low value of copperweld. These target hardening measures would increase the effort required to steal copper cables.

- Similarly to the USA, South Africa should implement a theft alerts website or mobile application through the proposed SAPS Non-Ferrous Metal Theft Unit. It would permit scrap metal dealers to collaborate with the police, private security companies and utility companies, by reporting suspected copper cable thefts and circulating crime information through the SAPS Non-Ferrous Metal Theft Unit. These copper cable theft incidents should first be evaluated and confirmed by this Unit before being disseminated to all registered subscribers within a specific range of the crime site.
- Private security providers should perform regular risk assessments and based thereon enhance their security measures and tactics.

### **6.3.3 Recommendations enforcing firmer legislation regulating licensed scrap metal dealers**

- i. South Africa should, like measures implemented in the USA, UK and France enact firmer legislation regulating licensed scrap metal dealers operational in South Africa. Thus, it is recommended that the Second-Hand Goods Control Act 6 of 2009 be amended to include increased record keeping and penalties for non-compliant scrap dealers. These increased transaction trails and harsher punishments should compel scrap metal dealers to obtain identification from copper sellers, record the registration number of the vehicle the seller is driving, retain purchase records for at least two years, ban recyclers from making cash transactions exceeding a certain amount, and impose substantial fines for violators. Payments should only be made by electronic funds transfer or direct debit or credit transactions.

---

<sup>5</sup> Using an exclusive high-heat, high-pressure process, Copperweld permanently link high-strength steel or aluminium and copper. The copper shields the core metal from corrosion, and the core reinforces the copper offering the same electrical performance as solid copper and the strength of steel or aluminium. Copperweld's permanently bonded copper covering can never be returned to virgin copper, making its conductors uninviting to metal recyclers and fruitless for copper thieves. Copperweld® brand products are manufactured solely by Copperweld Bimetallics in the USA.

- ii. Moreover, the Second-Hand Goods Control Act 6 of 2009 should compel second-hand scrap metal dealers to obtain a written statement from copper suppliers confirming lawful ownership to sell copper. In addition to these measures, this Act should also force second-hand metal dealers to install CCTV cameras on their premises to obtain footage of copper vendors and the traded copper products as record-keeping for police inspections.

These measures would deter copper cable thieves from selling stolen cable to scrap metal dealers for fear of being identified and linked to stolen copper cable. In addition, prospective copper cable thieves and scrap metal dealers would be aware that copper cables are identifiable by the SAPS.

#### **6.4 CONCLUSION**

The research findings indicate various shortcomings limiting the NFMCCC's effectiveness and its impact on copper cable theft. The SAPS plan to establish a forum addressing copper cable theft in South Africa is encouraging; however, this forum's impact on copper cable theft does not achieve the desired results. It is suggested that the SAPS evaluate the constraints, shortcomings and challenges experienced by the NFMCCC to enhance the impact on copper cable theft. Consequently, the functioning of the NFMCCC in its current format cannot be justified, hence the recommendation that the NFMCCC be replaced with a specialised SAPS Non-Ferrous Metals Theft Unit that could enhance police impact on copper cable theft.

## LIST OF REFERENCES

- Adam, K. (2011, December 28). Metal theft ravages British infrastructure. *The Washington Post*. Retrieved October 19, 2019, from Adam, K 2011, 'Metal theft ravages Britain's infrastructure', Washington Post, 28 December,
- Amisi, M. M. (2015). Development of South Africa's national evaluation policy and system 2011-2014. *African Evaluation Journal*, 109-116.
- Araie, F. (2019, February 22). Rampant Cable Theft is Treason. *Sunday Times*. Retrieved June 24, 2019, from <https://www.businesslive.co.za/fm/opinion/letters/2019-02-22-letter-rampant-cable-theft-is-treason>
- Arendse, N. (2010). Copper theft prevention - an analysis. Retrieved July 29, 2019, from <http://web.vdw.co.za/Portals/25/Documents/Copper/Neil%20Arendse%20-%20Copper%20Theft%20P>
- Associated Press. (2015, June 16). String of copper thefts in the city put subway riders in danger. Retrieved November 12, 2019, from <https://www.gov1.com/transportation/articles/string-of-copper-thefts-in-the-city-puts-subway-riders-in-danger-5yt46jtZyHUXXDm/>
- Bell, T. (2018, August 14). The world's 10 largest copper producers. Retrieved June 22, 2019, from <https://www.thebalance.com/the-10-biggest-copper-producers-2010-2340291>.
- Berg, B. L. (2008). *Qualitative research methods for the social sciences* (7th ed.). Allyn & Bacon.
- Bergal, J. (2018, December 10). Copper thieves strike America's roadways. *Arizona Daily Star*. Retrieved June 19, 2019, from <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2018/12/10/copper-thieves-strike-americas-roadways>
- Berman, S. (2017). *Impact research, process for qualitative research and conducting in-depth interviews*. California: University of California Press.
- Bernard, R. H. (2018). *Research methods in anthropology: qualitative and quantitative approaches*. Rome: Alta Mira Press.

- Beukman, F. (2018). Police committee calls for independent investigation into Hawks conduct. Retrieved June 19, 2019, from <https://www.parliament.gov.za/press-releases/police-committee-calls-independent-investigation-hawks-conduct>
- Bindeman, R. (2011, October 13-14). Frustration regarding the theft of non-ferrous metals: part one and two. *Copper Theft Workshop*. Johannesburg.
- Bloomberg Business. (2015, July 12). 2015 Bloomberg Impact Report. Retrieved February 12, 2019, from <https://www.bloomberg.com/company/press/2015-bloomberg-impact-report-a-message-from-our-founder/>
- Booyens, Y. (2013, July 12). SAPS to up game against copper cable theft. *Engineering News*. Retrieved December 12, 2019, from <https://www.engineeringnews.co.za/article/saps-to-tackle-copper-cable-theft-2013-07-12/>
- Bornman, J. (2018, July 13). Eskom recovers stolen infrastructure worth R5M, 1 person arrested. *News 24*. Retrieved June 29, 2019, from <https://www.news24.com/news24/SouthAfrica/News/eskom-recovers-stolen-infrastructure-worth-r5m-1-person-arrested-20180713>
- Burchell, J. (2006). *Principles of Criminal Law*. Cape Town: Juta & Co.
- Business Against Crime South Africa. (2012). National Strategy and Funding Proposal 2012-2015. Gauteng: BACSA.
- Business Tech. (2012, March 22). Government is "losing the war on copper theft" - DA. *Business Tech*. Retrieved from [https://businesstech.co.za/news/government/8186/government-is-losing-the-war-on-copper-theft-da/?\\_cf\\_chl\\_jschl\\_tk\\_=d8bd887c780fdbf18a1580256dda0263b6904327-1609942378-0-AUUh9lrDyu7iqjs1Q0Sxmy3-Wg3bootw3d0zx5rXUUz8wuOnalzAD1w7R0P4hU1E-es0nYj8RPigis1GbJ2z](https://businesstech.co.za/news/government/8186/government-is-losing-the-war-on-copper-theft-da/?_cf_chl_jschl_tk_=d8bd887c780fdbf18a1580256dda0263b6904327-1609942378-0-AUUh9lrDyu7iqjs1Q0Sxmy3-Wg3bootw3d0zx5rXUUz8wuOnalzAD1w7R0P4hU1E-es0nYj8RPigis1GbJ2z)
- Canadian Electricity Association. (2015, January). Copper Theft from Canada's Electricity Infrastructure. Retrieved June 11, 2019, from <https://electricity.ca/wp-content/uploads/2017/05/CopperTheft-1.pdf>
- Chetty, P. (2010, June). Telkom stop the cable thieves. *IOL*. Retrieved July 26, 2019, from <https://www.iol.co.za/news/south-africa/stop-the-cable-thieves-486395>



- Coetzee, J. B. (2013). A case study of non-ferrous metal theft at a selected mine in South Africa. *Unpublished Master's Dissertation*. University of South Africa. Retrieved May 24, 2020, from [http://uir.unisa.ac.za/bitstream/handle/10500/13332/dissertation\\_coetzee\\_jb.pdf?sequence=1](http://uir.unisa.ac.za/bitstream/handle/10500/13332/dissertation_coetzee_jb.pdf?sequence=1)
- Combined Private Investigations. (2019, January 2). *Combined Private Investigations*. Retrieved December 1, 2019, from <http://www.combinedpi.co.za/>
- Cook, J. A. (2015). Beating the red gold rush: copper theft and homeland security. *Unpublished MA dissertation*. Naval Postgraduate School.
- Council of the European Union. (2014). Establishing a list of contact points responsible for countering metal theft. Retrieved November 1, 2020, from [https://www.parlament.gv.at/PAKT/EU/XXV/EU/03/67/EU\\_36702/imfname\\_10490735.pdf](https://www.parlament.gv.at/PAKT/EU/XXV/EU/03/67/EU_36702/imfname_10490735.pdf)
- Creswell, J. W. (2013). *Qualitative inquiry and research design: choosing among five approaches* (3rd ed.). London: SAGE.
- Crime and Misconduct Commission Queensland. (2012). *Organise property crime in Queensland*. CMC Queensland. Retrieved November 23, 2019, from <https://www.ccc.qld.gov.au/sites/default/files/Docs/Publications/CMC/Organised-property-crime-in-Qld-2012.pdf>
- Dantzker, M. L., & Hunter, R. D. (2000). *Research methodology for criminology and criminal justice*. California: Butterworth-Heinemann.
- Dantzker, M. L., Hunter, R. D., & Quinn, S. T. (2016). *Research Methodology for Criminology and Criminal Justice* (4th ed.). England: Jones & Bartlett Publishers.
- De Vos, A., Strydom, H., Fouche, C., & Delpont, C. (2011). *Research at Grass Roots: For Social Sciences and Human Services Professions*. Pretoria: Van Schaik Publishers.
- Delfini, S. (n.d.). Pol-PRIMETT: tracking metal theft. Retrieved November 30, 2020, from [http://www.pol-primett2.org/images/files/content\\_683\\_5\\_Pol-PRIMETT%20Conference%20220312%20-%20Stefano%20Delfini%20Ministero%20Dell'Interno.pdf](http://www.pol-primett2.org/images/files/content_683_5_Pol-PRIMETT%20Conference%20220312%20-%20Stefano%20Delfini%20Ministero%20Dell'Interno.pdf)

- Denscombe, M. (2010). *The good research guide for small-scale social research projects* (3rd ed.). England: Open University Press.
- Dodd, C. (2020, November 5). *The most abundant elements in the earth's crust*. Retrieved December 3, 2020, from <https://www.worldatlas.com/articles/the-most-abundant-elements-in-the-earth-s-crust.html>
- Dordley, L. (2019). Metrorail securities makes more than 300 arrests. Cape Town. Retrieved June 25, 2019, from [https://www.google.com/search?q=metrorail+security+makes+more+than+300+arrestcape+town+etc&rlz=1C1SQJL\\_enZA786ZA786&oq=metrorail+security+make+s+more+than+300+arrest-+cape+town+etc&ags=chrome..69i57j33.77](https://www.google.com/search?q=metrorail+security+makes+more+than+300+arrestcape+town+etc&rlz=1C1SQJL_enZA786ZA786&oq=metrorail+security+make+s+more+than+300+arrest-+cape+town+etc&ags=chrome..69i57j33.77)
- Drodskie, P. (2018). *Copper theft remains a serious concern - Eskom, 2018*. Retrieved August 2, 2019, from Business Live: [https://www.google.com/search?q=\(Copper+theft+remains+a+serious+concern+-+Eskom%2C+2018\)+Business+Liv](https://www.google.com/search?q=(Copper+theft+remains+a+serious+concern+-+Eskom%2C+2018)+Business+Liv)
- Elvia, E. (2018). How to prevent copper theft. Retrieved July 25, 2019, from <https://reolink.com/how-to-prevent-copper-theft/>
- Eskom. (2011). The Eskom factor. Retrieved December 1, 2020, from [https://www.eskom.co.za/OurCompany/SustainableDevelopment/Pages/The\\_Eskom\\_Factor.aspx](https://www.eskom.co.za/OurCompany/SustainableDevelopment/Pages/The_Eskom_Factor.aspx)
- Evans, C. (2011, June 19). *Copper theft: a crime wave from history*. Retrieved August 2, 2019, from Google Scholar: [https://www.google.com/search?rlz=1C1AWFA\\_enZA858ZA858&ei=0cBDXfi\\_Gli\\_ckwXkyL5A&q=Evans%2C+C.+2011](https://www.google.com/search?rlz=1C1AWFA_enZA858ZA858&ei=0cBDXfi_Gli_ckwXkyL5A&q=Evans%2C+C.+2011)
- FBI Criminal Intelligence Section. (2008). *Copper theft threatens US Critical Infrastructure*. State Services. Retrieved July 29, 2019, from <https://www.fbi.gov/stats-services/publications/copper-thefts>
- Feni, Z. (2007, June 26). Sue scrap dealers, Chamber of Commerce urges. *Cape Argus*, p. 6.
- Flick, U. (2011). *Introducing research methodology: a beginner's guide to doing a research project*. SAGE: London.

- Francavilla, C. (2014). Forces to keep metal theft teams after taskforce ends. Retrieved November 29, 2020, from <https://www.mrw.co.uk/home/forces-to-keep-metal-theft-teams-after-taskforce-ends-04-09-2014/>
- Gaffar, Y. (2016). Copper thieves busted in Kriel. *Middelburg Observer*. Retrieved November 27, 2020, from <https://mobserver.co.za/60124/copper-thieves-busted-in-kriel-2/>
- Geldenhuis, K. (2008, February 4). *Non-ferrous metal theft brings cities to their knees*. Retrieved April 12, 2020, from PMG: <https://static.pmg.org.za/docs/080227nfmt.pdf>
- Gilbert, P. (2016, May 31). Copper cable theft costs Telkom R 200m. *ITWEB*. Retrieved June 24, 2019, from <https://www.itweb.co.za/content/nLPp6VMrPjavDKQz>
- Gladdis, K. (2011, November 13). Romanian gangs 'drive increase in metal theft' as cost of plunder hits 770m pounds a year. *Daily Mail UK*. Retrieved July 16, 2019, from <https://www.dailymail.co.uk/news/article-2061171/Romanian-gangs-drive-increase-metal-theft-cost-plunder-hits-770m-year.html>
- Goosen, R. (2017). Geospatial intelligence counter copper cable conductor theft. Retrieved July 26, 2019, from [https://apps.azdot.gov/ADOTLibrary/publications/project\\_reports/PDF/AZ657.pdf](https://apps.azdot.gov/ADOTLibrary/publications/project_reports/PDF/AZ657.pdf)  
<https://www.insurancejournal.com/news/east/2015/06/03/370377.htm>
- Gray, D. E. (2014). *Doing research in the real world*. California: SAGE.
- Groover, M. P. (2016). *Groover's principles of modern manufacturing: materials, processes, and systems, SI Version* (6th ed.). Utrecht: Wiley Press.
- Herrmann, L. (2012, January 3). Price of copper leads to surge in British Rail thefts. *Digital Journal*. Retrieved March 22, 2019, from <http://www.digitaljournal.com/article/317204>
- Hi-Tech Security Solutions. (2011). Copper Cable Theft Conference. Retrieved June 13, 2020, from <http://www.securitysa.com/article.aspx?pkIarticleid=6974>
- Home, A. (2015, June 1). China's booming copper imports an echo of the last crisis. Retrieved May 14, 2019, from <https://www.mining.com/web/chinas-booming-metal-imports-an-echo-of-the-last-crisis/>
- Hunt, K. (2014, May 8). Copper Theft. *Insurance News Net*. Retrieved August 17, 2019, from <https://insurancenewsnet.com/oarticle/COPPER-THEFT-a-501243>

- Innvaer, S., Vist, G., Trommald, M., & Oxman, A. D. (2002). Health policy-makers' perceptions of their use of evidence: a systematic review. *Journal of Health Services Responsible Policy*, 239-244.
- International Union of Railways. (2013). Metal theft on the railways. Retrieved November 2, 2020, from [https://uic.org/IMG/pdf/security\\_leaflet-metaltheft2013-pages.pdf](https://uic.org/IMG/pdf/security_leaflet-metaltheft2013-pages.pdf)
- Kalagadi Manganese. (2016, March 9). *KM: Kalagadi offers reward following copper cable theft at its mine*. Retrieved July 13, 2019, from Polity: <https://www.polity.org.za/article/km-kalagadi-offers-reward-following-copper-cable-theft-at-its-mine-2016>
- Kane, C. (2011). Scrap metal firms oppose bill to ban cash buys. Retrieved November 30, 2020, from <https://ca.reuters.com/article/instant-article/idUKTRE7B40Q920111205>
- Kemp, G., Walker, S., Palmer, R., Baqwa, D., Gevers, B., Leslie, B., & Steynberg, A. (2018). *Criminal Law in South Africa* (3rd ed.). Cape Town: Oxford University Press.
- Klinger, D. A., & Brunson, R. K. (2009). Police officer's perceptual distortions during lethal force situations: informing the reasonableness standard. *Criminology & Public Policy*, 8(1), 93-123.
- Koba, M. (2013, July 30). Copper theft like an epidemic sweeping US. *CNBC Crime*. Retrieved July 30, 2019, from <https://www.cNBC.com/id/100917758>
- Kolevar, K. (2007). *An assessment of copper wire theft from electric utilities*. US Department of Energy. Retrieved September 23, 2019, from <https://www.oe.netl.doe.gov/docs/copper042707.pdf>
- Kumar, R. (2019). *Research methodology: step-by-step guide for beginners*. Los Angeles: SAGE.
- Labuschagne, G. (2015). Criminal investigative analysis: an applied perspective. In R. Zinn, & S. Dintwe, *Forensic Investigation: legislative principles and investigative practices*. Cape Town: Juta & Co.
- Le Roux, H. (2008). Cable theft costs Telko R 835 million. Retrieved November 12, 2020, from <https://www.engineeringnews.co.za/article/cable-theft-costs-south-africa-billions-a-year-2007-08-03>

- Lichtenberg, A. (2012, July 30). Alliance against metal thieves. Retrieved June 19, 2019, from <https://www.dw.com/en/alliance-against-the-metal-thieves/a-16131662>
- Liebenberg, A. S. (2018). Examining the significance of Modus Operandi in copper theft investigations. *Unpublished MA Dissertation, University of South Africa*. University of South Africa.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. California: Sage Publications.
- Lindeque and Others v Hirsch and Others, In Re: Pre-paid24 (Pty) Limited, 2019/8846 ZAGPJHC 122 (Johannesburg High Court May 3, 2019).
- Mamaila, M. (2019, April 19). Ongoing copper cable theft negatively affects power capacity. *Engineering News*. Retrieved October 7, 2019, from <https://www.engineeringnews.co.za/login.php?url=/article/ongoing-copper-cable-theft-negetively-affects-power-generation-capacity-2019-04-19>
- Maree, K. (2001). *First steps in research*. Pretoria: Van Schaik Publishers.
- Marsh, I., Melville, G., Norris, G., & Cochrane, J. (2011). *Crime and Criminal Justice*. California: Routledge Press.
- Marshall, C., & Rossman, G. B. (2011). *Designing qualitative research* (5th ed.). North Carolina: SAGE.
- Mawisa, C. (2019, March 6). The fightback against cable theft. *Carte Blanche*. M-Net. Retrieved July 19, 2019, from <https://m-net.dstv.com/show/carte-blanche/videos/the-fightback-against-cable-theft/video#>
- Maxfield, M. G., & Babbie, E. R. (2017). *Research Methods for Criminal Justice and Criminology* (7th ed.). Oxford: Cengage.
- McCorkell, A. (2011, February 27). Copper thefts rise to an all-time high. *Independent*. Retrieved April 10, 2019, from <https://www.independent.co.uk/news/uk/crime/copper-thefts-rise-all-time-high-2226773.html>
- McNees, C. (2017, October 9). *Metal theft claims from January 1, 2014, through December 31, 2016*. Retrieved June 22, 2019, from NICB: <https://www.nicb.org/sites/files/2017-11/MetalTheftClaims2016Report.pdf>

- Michael, N. (2012, March 22). Eskom and Transnet need a plan to stop copper theft (DA Spokesperson on Public Enterprises). Retrieved September 18, 2019, from <https://allafrica.com/stories/201203221180.html>
- Morris, M. (2017, October 31). Global copper thieves strip SA's economy. *IOL*. Retrieved June 20, 2019, from <https://www.iol.co.za/news/global-copper-thieves-strip-sas-economy-10311623> (
- Mouton, J. (2014). *Understanding social reserchers* . Pietermaritzburg: Interpak Books.
- Nationwide. (2019, June 22). Protect your business from scrap metal theft. Retrieved December 10, 2020, from <https://www.nationwide.com/lc/resources/small-business/articles/metal-theft-prevention>
- New 24. (2014, June 24). 4 things you didn't know about copper cable theft. Retrieved July 14, 2020, from <https://www.news24.com/News24/4-things-you-didnt-know-about-copper-theft-20140626>
- Noah, A. (2012, February). Eskom Infrastructure Theft Presentation. *Presentation to the Select Committee on Economic Development*. PMG. Retrieved February 22, 2019, from [https://static.pmg.org.za/docs/120228eskominfra-edit\\_0.pdf](https://static.pmg.org.za/docs/120228eskominfra-edit_0.pdf)
- O'Donnell, L. (2012). Over and security review: use of legislation available to the council to tackle metal theft within County Durham. Retrieved January 11, 2020, from <https://democracy.durham.gov.uk/documents/s25165/180912-SS-CT-Item10-Metal-Theft-FinalRpt.pdf>
- O'Leary, Z. (2014). *The essential guide to doing research*. California: SAGE Publications.
- O'Sullivan, P. (2016). Telkom explains changes to their uncapped wireless LTE. Retrieved July 25, 2020, from <http://www.702.co.za/articles/25419/telkom-explains-changes-to-their-uncapped-wireless-lte>
- Parks, M. (2015, December 3). COSATU Press Release. *COSATU Parliamentary Office*. Johannesburg.
- Passenger Rail Agency South Africa. (2013). Annual Report 2012/2013. Pretoria: Government Printers.
- Passenger Rail Agency of South Africa (PRASA). (2019). *Annual Report and Financial Statements 2018/2019*. PRASA. Retrieved June 22, 2020, from

<http://www.prasa.com/Annual%20Reports/Prasa%20Annual%20Report%202019-20.pdf>

Peters, S. (2014, January 10). Engineer's death blamed on cable theft. *IOL*. Retrieved February 22, 2019, from [https://www.google.com/search?q=peters+cable+theft+to+blame+for+deaths+and+burns&rlz=1C1AWFA\\_enZA858ZA858&oq=peters+cable+theft+to+blame+for+deaths+and+burns&aqs=chrome..69i57.13951j0j7&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=peters+cable+theft+to+blame+for+deaths+and+burns&rlz=1C1AWFA_enZA858ZA858&oq=peters+cable+theft+to+blame+for+deaths+and+burns&aqs=chrome..69i57.13951j0j7&sourceid=chrome&ie=UTF-8)

Philip, R. (2014). Expert cable theft solutions. *News 24*. Retrieved July 26, 2019, from <https://www.news24.com/Archives/Witness/Experts-cable-theft-solutions-20150430>

Pieterse, L. (2017, October 29). Johannesburg gripped by copper cable warfare. *News 24*. Retrieved June 20, 2019, from <https://www.news24.com/SouthAfrica/News/johannesburg-gripped-by-copper-cable-warfare-20171029>

Planting, S. (2011). Copper theft: government and big business unite to do battle. *Citizen*. Retrieved June 15, 2019, from <http://www.citizen.co.za/citizen/content/en/citizen/business-news?oid=217606&sn=Detail&pid=146848&Copper-theft--government-and--big-business-unite-to-do-battle>

Pol-PRIMETT. (2011). Tracking metal theft: findings of Pol-PRIMETT research activities. Retrieved November 30, 2020, from [https://www.agenformedia.com/agensite/wp-content/uploads/2016/02/findings\\_of\\_pol-primett\\_research\\_activities\\_0.pdf](https://www.agenformedia.com/agensite/wp-content/uploads/2016/02/findings_of_pol-primett_research_activities_0.pdf)

Pol-PRIMETT. (2013). Tackling metal theft: an emerging threat to Europe's economic security? Retrieved November 1, 2020, from [https://www.agenformedia.com/agensite/wp-content/uploads/2020/02/pol-primett\\_research\\_paper\\_february\\_2013\\_version\\_6.pdf](https://www.agenformedia.com/agensite/wp-content/uploads/2020/02/pol-primett_research_paper_february_2013_version_6.pdf)

Pretorius, W. L. (2012). A criminological analysis of copper cable theft in Gauteng. *Unpublished Master's Dissertation*. University of South Africa.

Ramphele, L. (2019, February 7). Five miners confirmed dead and 22 others still trapped at Gloria Coal Mine. *702 News*. Retrieved October 12, 2019, from

<http://www.702.co.za/articles/337043/five-miners-confirmed-dead-and-22-others-still-trapped-at-gloria-coal-mine>

Rhoda, G. (2018). *Private members proposal to amend the Protection of Constitutional Democracy against Terrorist Related Activities Act 33 of 2004*. Pretoria: Parliament, South Africa.

Robertson, R. (2018, July 23). Executive Director of Combined Private Investigations Interview. (A. Liebenberg, Interviewer)

Rogers, C. (2012, February 19). Undercover with copper-cable thieves who are costing Britain 770million pounds a year. *Daily Mail UK*. Retrieved November 24, 2020, from <https://www.dailymail.co.uk/home/moslive/article-2101462/Copper-cable-theft-costing-Britain-fortune.html>

RTGE Staff. (2015, July 28). Container theft ring busted in China. Retrieved July 2, 2019, from <https://www.recyclingtoday.com/article/copper-recycling-scrap-theft-china/>

S v Malome Alfred Matsitela & 3 others , (78/2017) [2018] ZAFSHC 135.

SACCI. (2014, November 27). SACCI on copper theft barometer: October 2014. *Polity*. Retrieved May 23, 2019, from <https://www.polity.org.za/article/sacci-sacci-on-copper-theft-barometer-october-2014-2014-11-27>

Scheepers, D. (2013, February). *Copper Theft on SA's mines*. Retrieved July 23, 2019, from High-Tech Security Solutions: <http://www.securitysa.com/7659a>

Schoenfelder, J. (2009). *Options for reducing copper theft Final Report 657*. Rockville, MD: Mid-Atlantic Innovative Technology Center.

Sidebottom, A. (2012). Metal Theft. *JDiBrief Series: Jill Dando Institute of Security and Crime Science*. Retrieved June 12, 2019, from [www.jdibrief.com](http://www.jdibrief.com).

Slessor, C. (2018, May 16). Your escape is futile: police stand-off with two men allegedly stealing copper. *ABC News*. Retrieved June 22, 2019, from <https://www.abc.net.au/news/2018-05-16/police-arrest-alleged-copper-theives/9765874>

Smith, K. (2013). *Environmental hazards: assessing risk and reducing disaster*. London: Taylor & Francis Ltd.

Snyman, C. R. (2015). *Criminal Law* (6th ed.). Durban: LexisNexis.



- Sokanyile, A. (2018, October 27). Eskom's cable theft crisis. *IOL*. Retrieved August 22, 2019, from <https://www.iol.co.za/weekend-argus/news/eskoms-cable-theft-crisis-17666656>
- South African Chamber of Commerce and Industry. (2015, July 4). SACCI Copper Theft Barometer: February 2015. Retrieved August 19, 2015, from <https://africabusinesscommunities.com/news/sacci-copper-theft-barometer-february-2015.html>
- South African Legislature. (1955). *Second-Hand Goods Act 23 of 1955*. Government Printers.
- South African Legislature. (1977). *Criminal Procedure Act 51 of 1977*. Government Printers.
- South African Legislature. (1989). *Legal Succession to the South African Transport Services Act 9 of 1989*. Pretoria: Government Printers.
- South African Legislature. (1995). *South African Police Services Act 68 of 1995*. Government Printers.
- South African Legislature. (1996). *Constitution of the Republic of South Africa, 1996*. Pretoria: Government Printers.
- South African Legislature. (1998). *Prevention of Organised Crime Act 121 of 1998*. Government Printers.
- South African Legislature. (2004). *Prevention and Combatting of Corrupt Activities Act 12 of 2004*. Government Printers.
- South African Legislature. (2009). *Second-Hand Goods Control Act 6 of 2009*. Pretoria: Government Printers.
- South African Legislature. (2015). *Criminal Matters Amendment Act 18 of 2015*. Pretoria: Government Printers.
- South African Police Services. (2011). *Circular 2/28/23*. South African Police Services.
- South African Police Services. (2011). *SAPS Annual Performance Plan 2010/2011*. Pretoria: Government Printers.
- South African Police Services. (2015). *Annual Report 2014/2015*. Pretoria: Government Printers.

- South African Police Services. (2016). National Instruction 2 of 2016 Second-Hand Goods: Dealers and Recyclers. *National Instruction*. South African Police Services.
- South African Police Services. (2017). *Annual Report 2016/2017*. Pretoria: Government Printers.
- South African Police Services. (2018). SAPS Annual Performance Plan 2017/2018. Pretoria: Government Printers.
- South African Police Services. (2019). SAPS Annual Performance Plan 2018/2019. Government Printers.
- South African Police Services. (2019). SAPS Strategic Plan 2014-2019. Pretoria: Government Printers.
- South African Press Association. (2012, February 28). Copper theft on the increase. *Business Tech*. Retrieved November 12, 2019, from [https://businesstech.co.za/news/trending/6855/copper-theft-on-the-increase/?\\_cf\\_chl\\_jschl\\_tk=f379d0fd7be194725e45b74184e2be6e9ae9b307-1609944188-0-ASrtpgfFH1plnpoJdimINW6Bbf-Z\\_64i-u5O9Grhxp5VWXUwdZqa-hFFNWhhuPpABEINacLlfzTxALNU-jc6xxdjtOW5qruuGNQDj-ujT](https://businesstech.co.za/news/trending/6855/copper-theft-on-the-increase/?_cf_chl_jschl_tk=f379d0fd7be194725e45b74184e2be6e9ae9b307-1609944188-0-ASrtpgfFH1plnpoJdimINW6Bbf-Z_64i-u5O9Grhxp5VWXUwdZqa-hFFNWhhuPpABEINacLlfzTxALNU-jc6xxdjtOW5qruuGNQDj-ujT)
- South African Press Association. (2014, November 27). *Copper theft up in October*. Retrieved June 21, 2019, from Fin 24: <https://www.fin24.com/Economy/Copper-theft-up-in-October-20141127-4>
- Speer, P. (2012, March 8). Top 5 States reporting copper theft. *Digital Insurance*. Retrieved June 21, 2019, from <https://www.dig-in.com/news/top-5-states-reporting-copper-theft>
- Strydom, H. (2005). Ethical aspects of research in the social sciences and human service professions. In A. S. De Vos, H. Strydom, C. B. Fouche, & C. L. Delport, *Research at the grassroots for the social sciences and human service professions* (3rd ed., pp. 97-143). Pretoria: Van Schaik Publishers.
- Tan, H. (2017, February 19). China will help drive 33% increase in global copper prices by 2020. Retrieved October 7, 2019, from <https://www.cnbc.com/2017/02/19/china-will-help-drive-33-increase-in-global-copper-prices-by-2020-citi.html>

- Telkom. (2018, March). Telkom Integrated Report for the year ending 31 March 2018. Retrieved June 13, 2019, from [http://www.sharedata.co.za/data/006966/pdfs/TELKOM\\_ar\\_mar18.pdf](http://www.sharedata.co.za/data/006966/pdfs/TELKOM_ar_mar18.pdf)
- The Cambridge Dictionary. (2020, January 5). The Cambridge Dictionary. *Dealer*. Retrieved December 5, 2020, from <https://dictionary.cambridge.org/dictionary/english/dealer>
- The Connexion. (2011, April 1). 40m Euro bid to cut railway delays. Retrieved December 4, 2020, from <https://www.connexionfrance.com/Archive/40m-bid-to-cut-railway-delays>
- The Free Dictionary. (2020, January 21). The Free Dictionary. *Copper*. Retrieved December 4, 2020, from <https://www.thefreedictionary.com/copper#:~:text=%20cop%C2%B7per%201%20%201%20Symbol%20Cu%20A,having%20predominantly...%205%20A%20reddish%20brown.%20More%20>
- Thelwell, E. (2014, June 26). 4 Things you didn't know about copper theft. *News 24*. Retrieved October 19, 2019, from <https://www.news24.com/news24/SouthAfrica/News/4-things-you-didnt-know-about-copper-theft-20140626/comments>
- Torkelson, J. M. (2010, August 22). *Unveiling thermal transitions of polymers in subnanometer pores*. Retrieved August 2, 2019, from NCBI: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2982181/>
- Transnet. (2012). Cable Theft Analysis 2008/2009-2011/2012. Johannesburg: Transnet.
- Transnet. (2012/2013, January 15). The Transnet. Retrieved August 29, 2019, from <https://www.transnet.net/BusinessWithUs/MDS/External%20Magazine%20-%20Final.pdf>
- University of South Africa. (2007). Policy on Research Ethics. Unisa. Retrieved from [https://www.unisa.ac.za/static/corporate\\_web/Content/Colleges/CGS/documents/Policy-on-Research-Ethics-rev-appr-Council-20.09.2013.pdf](https://www.unisa.ac.za/static/corporate_web/Content/Colleges/CGS/documents/Policy-on-Research-Ethics-rev-appr-Council-20.09.2013.pdf)
- University of South Africa. (2020, April 9). *University of South Africa COVID-19 position statement on research ethics*. Retrieved April 9, 2020, from UNISA: [https://www.unisa.ac.za/static/corporate\\_web/Content/Colleges/CAES/Research/](https://www.unisa.ac.za/static/corporate_web/Content/Colleges/CAES/Research/)

[docs/UNISA\\_COVID-19\\_POSITION\\_STATEMENT\\_ON\\_RESEARCH\\_ETHICS.pdf](#)

- Van Dalen, P. (2012, October 1). Copper Cable Theft Summit. *Address by P Van Dalen*.
- Van Dalen, P. (2017, August 19). Personal Interview with author (notes on file). (A. Liebenberg, Interviewer)
- Van den Berg, L. (2007). Non-ferrous metal theft project. *Business Against Crime South Africa*. Pretoria: BACSA.
- van Zyl, G. (2016). Telkom copper thief hit with 25-year jail term. Retrieved June 20, 2019, from <https://www.fin24.com/Tech/News/telkom-copper-thief-hit-with-25-year-jail-term-20160822>
- Venter, I. (2008). How copper theft is ruining the economy and what's being done about it. Retrieved December 20, 2020, from <http://www.emogmeeromgmews/cp/za/artoc;e/how-copper-theft-is-ruining-the-enconomy-and-whatsbeing-done-about-it-j2009-08-29>
- Venter, I. (2008, August 29). How copper theft is ruining the economy and what's being done about it. *Engineering News*. Retrieved May 31, 2020, from <http://www.emogmeeromgmews/cp/za/artoc;e/how-copper-theft-is-ruining-the-enconomy-and-whatsbeing-done-about-it-j2009-08-29>
- Welman, C., Kruger, F., & Mitchell, B. (2005). *Research Methodology* (3rd ed.). Pretoria: Oxford University Press.
- Wentz, E. (2017). *How to design and present a successful dissertation proposal*. California: SAGE.
- West Bend. (2020). Copper Theft. Retrieved December 14, 2020, from [www.thesilverlining.com/safety-tips/copper-theft#:~:text=Paint%20Copper%20Black,waste%20the%20time%20to%20steal](http://www.thesilverlining.com/safety-tips/copper-theft#:~:text=Paint%20Copper%20Black,waste%20the%20time%20to%20steal)
- Western Cape Government. (2019). Cable Theft. Retrieved April 13, 2020, from <https://www.westerncape.gov.za/general-publication/cable-theft>
- Wilkinson, R. (2017, November 10). Tailored equipment advances mine safety in Africa. Retrieved April 11, 2019, from [https://www.engineeringnews.co.za/author.php?page=2&u\\_id=1171&](https://www.engineeringnews.co.za/author.php?page=2&u_id=1171&)

Wilson, G. (2018, May 20). R10M Metro Bill for cable theft. *Herald Live*. Retrieved June 24, 2019, from <https://www.heraldlive.co.za/weekend-post/your-weekend/2018-05-20-r10m-metro-bill-for-cable-theft/>

Wiltshire Times. (2013, January 28). Operation Tornado sees drop in metal thefts in Wiltshire. Retrieved January 19, 2020, from <https://www.wiltshiretimes.co.uk/news/10190270.operation-tornado-sees-drop-in-metal-thefts-across-wiltshire/>

## ANNEXURE A: CERTIFICATE CONFIRMING EDITING AND FORMATTING

### *CONFIRMATION OF ENGLISH EDITING*

To whom it may concern

This is to certify that the thesis with the title “**AN EVALUATION OF THE IMPACT OF THE NON-FERROUS METALS CRIME COMBATING COMMITTEE ON COPPER CABLE THEFT**”, to be submitted for examination by **Mr A S Liebenberg** , has been edited for language under my hand. Neither the research content nor the researcher's intentions were altered in anyway during the editing process.

I applied standard United Kingdom English language conventions during the editing process. I stand by the quality of the English language in this document, provided my amendments have been accepted and further changes made to the document have been submitted to me for review.

**Dr MG Karels**



---

## **ANNEXURE B: APPROVAL LETTER FROM BACSA**

**APPLICATION TO DO RESEARCH AT BUSINESS AGAINST CRIME TOPIC  
AN EVALUATION OF THE IMPACT OF THE  
NON-FERROUS METALS CRIME COMBATING COMMITTEE ON COPPER CABLE  
THEFT**

**SUPERVISOR : PROFESSOR JOHAN VAN GRAAN : UNISA**

**RESEARCHER : ANDRÉ SAREL LIEBENBERG : SAPS / UNISA**

I, **André Sarel Liebenberg**, ID No 560613 5099 08 2, Student No 37557523, a part time student at Unisa and registered at the Doctoral Level, hereby confirm that I will conduct the research by in-depth interviews to collect data

And

I hereby indemnify the service or any member against any claim for bodily injury, loss of life and the loss or damage of property which may occur as a result of me being on the premises for the purpose of conducting the research.

## **1. INTRODUCTION**

Copper theft has negative impact on the South African economy, as-well a significant challenge globally. South Africa is also experiencing a major problem with the high number of copper theft incidents which drain the economy outside the pro-active budget and also paves the way for corruption between the State and the provider to prepare these unforeseen losses.

It is estimated that cable theft costs South Africa up to R7 Billion per annum. Much of this is workers' hard-earned tax money and the poorest of the poor suffer most through these incidents.

Two people died, 19 were critically injured and a further 281 were injured, when two trains collided near Pretoria in January 2011. This was due to the theft of two x 25 meters copper cables disrupting the signaling system.

The financial cost of this accident to the trains and rails was more than R22 million which had a direct impact on the economy of South Africa due to the fact that the State also have the responsibility to subsidise some of these costs. Telkom reported in 2010/11, they suffered losses of up to R183.5 million due to cable theft. In certain areas Telkom has simply stopped replacing stolen cables due to high theft incidents. Eskom, Telkom and Transnet reported combined losses of more than R3.12 Billion due to copper theft between 2006 and 2011. Workers' jobs at these parastatals are threatened, as those state-owned companies are drained of their funds trying to repair the damages caused by cable and metal theft. Workers and companies suffer financial losses due to the constant train delays caused by cable theft.

### **1.1 RESEARCH AIM**

According to De Vos et al. (2012:108), the aim of the study indicates the central thrust of the research, while the goals identify the specific issues focussed on in the study. Leedy (1997:11) explains the aim of research is to discover new facts and their correct interpretations, to revise accepted conclusions, theories, or laws in the light of newly discovered facts, or the practical application of such a conclusion. The research aim is



strongly interlinked to the problem statement in order to ensure that all the gaps will be addressed systematically (Welman et al., 2005:2).

The research aim of this study is to examine the impact of copper theft in order to develop a preventative and investigative policing strategy to address copper theft comprehensively.

## 1.2 RESEARCH PURPOSE

According to Welman et al. (2005:22), the purpose of research is threefold: to describe **how** things are, that is, define the nature of the study object. To explain **why** things are the way they are; it may be so because one thing has caused another to change. We also like to explain **what** this relationship between things is and to predict phenomena, such as human behaviour in the workplace, with the aim of using this information, for example, to screen job applicants. Denscombe (2002:25) emphasises that there must be a reason for conducting research.

Based on the explanation of the purpose of research, as offered by Welman et al. (2005:22), this study focusses on the following purposes:

- To describe the impact of copper theft in South Africa.
- To explain why forensic investigators who investigate copper theft, do not understand the negative impact on the South African economy
- To investigate factors that hinder the implementation of an effective preventative and investigative policing strategy to address copper theft.
- To examine current policing strategies implemented to prevent and investigate copper theft.
- To explore the extent of cooperation between stakeholders to address copper theft.
- To examine international best practices to address copper theft.

## **2. VALUE OF THE RESEARCH**

This study and its outcomes could be taken into consideration to the advantage of the investigators, since it seeks to improve and develop forensic investigators' understanding and proficiency with regard to the application of the impact of copper theft on the South African economy during the investigation of copper theft. These investigators could also use the outcomes of this study as a yardstick for their present practices, in light of the findings of this research. The findings could also be used as an instrument to assist investigators who investigate copper theft by identifying and remedying any limitations, prove the seriousness of the negative impact copper theft has on the economy of the country in a Court of Law and enhancing training interventions for forensic investigators.

The attained knowledge will be made available to students and faculty of the University of South Africa (Unisa) and the greater academic community, for use in curriculum development; it will also be available as a research source for students and researchers. The broader South African society will also benefit if copper theft cases can be undertaken professionally and timeously, thereby creating a higher conviction rate. The reduction of copper theft and the increased conviction of perpetrators will benefit the country's economy since damages to the infrastructure of utilities, such as Eskom, Telkom, and the SA Railway Services, could be limited and service delivery to their clients could be enhanced.

## **3. METHODS TO ENSURE TRUSTWORTHINESS**

Qualitative approaches to achieving rigour include building trustworthiness, authenticity, credibility, transferability, dependability and conformability (Gray, 2014:186). Skrtic (in Lincoln & Guba, 1985) suggests that the following aspects should be addressed to ensure trustworthiness in qualitative studies:

- Transferability, with purposive sampling to illustrate pertinent issues and factors, and thick descriptions to provide evidence for making judgements about similarities between cases.

In order to ensure transferability in this study, the researcher applied purposive sampling to obtain responses from the participants. Comprehensive descriptions of the participants' responses to the semi-structured interview questions, in the form of verbatim excerpts, were illustrated to allow readers to make judgments regarding the transferability of the findings.

- Dependability, through the use of audit trails through the data.

To ensure dependability in this study, the researcher retained the audio recordings and transcripts of all the semi-structured interviews conducted. In addition, the researcher kept a detailed list of references consulted throughout the study. The researcher has further documented semi-structured interview guides to illustrate how semi-structured interviews were conducted. As a result, any other person could conduct interviews with the sampled participants with a high likelihood of reaching parallel results. The data analysis method was also described in detail.

- Conformability, with the audit showing the connections between data and the researcher's interpretations.

To ensure conformability in this study, the researcher kept a comprehensive account of the research methodology followed to control whether the interpretation of the findings, the recommendations and conclusions made can be drawn to their sources, and if they are supported by the analysis. The responses gained from the study participants have been electronically archived and the subsequent transcripts were stored for evaluation by other researchers, in order to authenticate the outcomes of the study.

- Credibility, the use of persistent observations; triangulation (of data, methods, theories and investigations); and member checks (where data and interpretations are tested with research participants).

In order to ensure credibility in this study, the research findings were taken back to respondents in order that they are able to evaluate whether such findings are a factual manifestation of their views.

- Authenticity, relates to the analysis and interpretation of the meanings and experiences that are lived and perceived by the subjects of the research. This means that the researcher is aware of the multiple voices contained within the data, and the subtle, sometimes conflicting, realities within it. The following questions could be asked: Are the interpretations true? Have rival explanations been considered?

To ensure authenticity of the analysed data and the interpretation thereof in this study, the researcher kept complete records of how data was analysed and subsequently interpreted. The researcher further took into account the multiple explanations from participants, and has not only incorporated selected explanations. As a result, a true reflection of the interpretation of the data was enhanced.

#### **4. ETHICAL CONSIDERATIONS**

According to Strydom (2005:57), ethics is a set of moral principles that offers rules and behavioural expectations about the most correct conduct towards experimental subjects and respondents. The researcher adhered to the following ethical obligations, as prescribed by O'Leary (2014:64):

- Informed consent  
O'Leary emphasises that participants can only give 'informed consent' to be involved in a research study if they have full understanding of their requested involvement, including time commitment, type of activity, topics that will be covered, as well as all emotional and physical risks potentially involved.

O'Leary further clarifies that informed consent implies that participants are:

*Competent* – participants should have reasonable intellectual capacity and psychological maturity.

*Autonomous* – participants are making self-directed and self-determined choices.

*Involved voluntarily* – participants should not be unaware, forced, pressured, or duped.

*Aware of the right to discontinue* – participants should not be under any obligation (or pressure) to continue involvement.

*Not deceived* – the nature of the study, any affiliations or professional standing, and the intended use of the study should be honest and open.

*Not coerced* – positions of power should not be used to get individuals to participate.

*Not induced* – while it may be acceptable to compensate participants for their time and effort, an inducement should not compromise a potential participant's judgement.

- Ensure no harm to participants  
Harm includes emotional, psychological or physical harm.
- Ensure confidentiality and anonymity  
Confidentiality involves protecting the identity of those providing research data; all identifying data remains solely with the researcher. Anonymity refers to protection against identification, even from the researcher; therefore, information, data and responses collected anonymously should not be identifiable with any particular respondent.

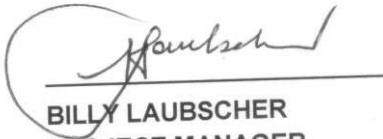


**RESEARCHER: ANDRÉ SAREL LIEBENBERG**

A registered student at university of South Africa at doctoral level  
(National Diploma, B-Tech, M-Tech)

**DATE: 20 MARCH 2020**

APPROVED / NOT APPROVED

A handwritten signature in black ink, appearing to read "Laubscher", is written over a horizontal line. The signature is stylized and cursive.

**BILLY LAUBSCHER**  
**PROJECT MANAGER**  
**BUSINESS AGAINST CRIME : WESTERN CAPE**

20 MARCH 2020

## **ANNEXURE C: APPROVAL LETTER FROM CPI**

**APPLICATION TO DO RESEARCH AT COMBINED PRIVATE INVESTIGATIONS  
(CPI) : FORENSIC INVESTIGATORS UNDER THE LEADERSHIP OF PRINCIPLE DIRECTOR  
ROY ROBERTSON**

**TOPIC**

**AN EVALUATION OF THE IMPACT OF THE  
NON-FERROUS METALS CRIME COMBATING COMMITTEE ON COPPER THEFT**

**SUPERVISOR : PROFESSOR JOHAN VAN GRAAN : UNISA**

**RESEARCHER : ANDRÉ SAREL LIEBENBERG : SAPS / UNISA**

I, **André Sarel Liebenberg**, ID No 560613 5099 08 2, Student No 37557523, a part time student at Unisa and registered at the Doctoral Level, hereby confirm that I will conduct the research by in-depth interviews to collect data

And

I hereby indemnify the service or any member against any claim for bodily injury, loss of life and the loss or damage of property which may occur as a result of me being on the premises for the purpose of conducting the research.

### **1. INTRODUCTION**

Copper theft has negative impact on the South African economy, as-well a significant challenge globally. South Africa is also experiencing a major problem with the high

number of copper theft incidents which drain the economy outside the pro-active budget and also paves the way for corruption between the State and the provider to prepare these unforeseen losses.

It is estimated that cable theft costs South Africa up to R7 Billion per annum. Much of this is workers' hard-earned tax money and the poorest of the poor suffer most through these incidents.

Two people died, 19 were critically injured and a further 281 were injured, when two trains collided near Pretoria in January 2011. This was due to the theft of two x 25 meters copper cables disrupting the signaling system.

The financial cost of this accident to the trains and rails was more than R22 million which had a direct impact on the economy of South Africa due to the fact that the State also have the responsibility to subsidise some of these costs. Telkom reported in 2010/11, they suffered losses of up to R183.5 million due to cable theft. In certain areas Telkom has simply stopped replacing stolen cables due to high theft incidents. Eskom, Telkom and Transnet reported combined losses of more than R3.12 Billion due to copper theft between 2006 and 2011. Workers' jobs at these parastatals are threatened, as those state-owned companies are drained of their funds trying to repair the damages caused by cable and metal theft. Workers and companies suffer financial losses due to the constant train delays caused by cable theft.

### **1.1 RESEARCH AIM**

According to De Vos et al. (2012:108), the aim of the study indicates the central thrust of the research, while the goals identify the specific issues focussed on in the study. Leedy (1997:11) explains the aim of research is to discover new facts and their correct interpretations, to revise accepted conclusions, theories, or laws in the light of newly discovered facts, or the practical application of such a conclusion. The research aim is strongly interlinked to the problem statement in order to ensure that all the gaps will be addressed systematically (Welman et al., 2005:2).



The research aim of this study is to examine the impact of copper theft in order to develop a preventative and investigative policing strategy to address copper theft comprehensively.

## 1.2 RESEARCH PURPOSE

According to Welman et al. (2005:22), the purpose of research is threefold: to describe **how** things are, that is, define the nature of the study object. To explain **why** things are the way they are; it may be so because one thing has caused another to change. We also like to explain **what** this relationship between things is and to predict phenomena, such as human behaviour in the workplace, with the aim of using this information, for example, to screen job applicants. Denscombe (2002:25) emphasises that there must be a reason for conducting research.

Based on the explanation of the purpose of research, as offered by Welman et al. (2005:22), this study focusses on the following purposes:

- To describe the impact of copper theft in South Africa.
- To explain why forensic investigators who investigate copper theft, do not understand the negative impact on the South African economy
- To investigate factors that hinder the implementation of an effective preventative and investigative policing strategy to address copper theft.
- To examine current policing strategies implemented to prevent and investigate copper theft.
- To explore the extent of cooperation between stakeholders to address copper theft.
- To examine international best practices to address copper theft.

## **2. VALUE OF THE RESEARCH**

This study and its outcomes could be taken into consideration to the advantage of the investigators, since it seeks to improve and develop forensic investigators' understanding and proficiency with regard to the application of the impact of copper theft on the South African economy during the investigation of copper theft. These investigators could also use the outcomes of this study as a yardstick for their present practices, in light of the findings of this research. The findings could also be used as an instrument to assist investigators who investigate copper theft by identifying and remedying any limitations, prove the seriousness of the negative impact copper theft has on the economy of the country in a Court of Law and enhancing training interventions for forensic investigators.

The attained knowledge will be made available to students and faculty of the University of South Africa (Unisa) and the greater academic community, for use in curriculum development; it will also be available as a research source for students and researchers. The broader South African society will also benefit if copper theft cases can be undertaken professionally and timeously, thereby creating a higher conviction rate. The reduction of copper theft and the increased conviction of perpetrators will benefit the country's economy since damages to the infrastructure of utilities, such as Eskom, Telkom, and the SA Railway Services, could be limited and service delivery to their clients could be enhanced.

## **3. METHODS TO ENSURE TRUSTWORTHINESS**

Qualitative approaches to achieving rigour include building trustworthiness, authenticity, credibility, transferability, dependability and conformability (Gray, 2014:186). Skrtic (in Lincoln & Guba, 1985) suggests that the following aspects should be addressed to ensure trustworthiness in qualitative studies:

- Transferability, with purposive sampling to illustrate pertinent issues and factors, and thick descriptions to provide evidence for making judgements about similarities between cases.

In order to ensure transferability in this study, the researcher applied purposive sampling to obtain responses from the participants. Comprehensive descriptions of the participants' responses to the semi-structured interview questions, in the form of verbatim excerpts, were illustrated to allow readers to make judgments regarding the transferability of the findings.

- Dependability, through the use of audit trails through the data.

To ensure dependability in this study, the researcher retained the audio recordings and transcripts of all the semi-structured interviews conducted. In addition, the researcher kept a detailed list of references consulted throughout the study. The researcher has further documented semi-structured interview guides to illustrate how semi-structured interviews were conducted. As a result, any other person could conduct interviews with the sampled participants with a high likelihood of reaching parallel results. The data analysis method was also described in detail.

- Conformability, with the audit showing the connections between data and the researcher's interpretations.

To ensure conformability in this study, the researcher kept a comprehensive account of the research methodology followed to control whether the interpretation of the findings, the recommendations and conclusions made can be drawn to their sources, and if they are supported by the analysis. The responses gained from the study participants have been electronically archived and the subsequent transcripts were stored for evaluation by other researchers, in order to authenticate the outcomes of the study.

- Credibility, the use of persistent observations; triangulation (of data, methods, theories and investigations); and member checks (where data and interpretations are tested with research participants).

In order to ensure credibility in this study, the research findings were taken back to respondents in order that they are able to evaluate whether such findings are a factual manifestation of their views.

- Authenticity, relates to the analysis and interpretation of the meanings and experiences that are lived and perceived by the subjects of the research. This means that the researcher is aware of the multiple voices contained within the data, and the subtle, sometimes conflicting, realities within it. The following questions could be asked: Are the interpretations true? Have rival explanations been considered?

To ensure authenticity of the analysed data and the interpretation thereof in this study, the researcher kept complete records of how data was analysed and subsequently interpreted. The researcher further took into account the multiple explanations from participants, and has not only incorporated selected explanations. As a result, a true reflection of the interpretation of the data was enhanced.

#### **4. ETHICAL CONSIDERATIONS**

According to Strydom (2005:57), ethics is a set of moral principles that offers rules and behavioural expectations about the most correct conduct towards experimental subjects and respondents. The researcher adhered to the following ethical obligations, as prescribed by O'Leary (2014:64):

- Informed consent  
O'Leary emphasises that participants can only give 'informed consent' to be involved in a research study if they have full understanding of their requested involvement, including time commitment, type of activity, topics that will be covered, as well as all emotional and physical risks potentially involved.

O'Leary further clarifies that informed consent implies that participants are:

*Competent* – participants should have reasonable intellectual capacity and psychological maturity.

*Autonomous* – participants are making self-directed and self-determined choices.

*Involved voluntarily* – participants should not be unaware, forced, pressured, or duped.

*Aware of the right to discontinue* – participants should not be under any obligation (or pressure) to continue involvement.

*Not deceived* – the nature of the study, any affiliations or professional standing, and the intended use of the study should be honest and open.

*Not coerced* – positions of power should not be used to get individuals to participate.

*Not induced* – while it may be acceptable to compensate participants for their time and effort, an inducement should not compromise a potential participant's judgement.

- Ensure no harm to participants  
Harm includes emotional, psychological or physical harm.
- Ensure confidentiality and anonymity  
Confidentiality involves protecting the identity of those providing research data; all identifying data remains solely with the researcher. Anonymity refers to protection against identification, even from the researcher; therefore, information, data and responses collected anonymously should not be identifiable with any particular respondent.



**RESEARCHER: ANDRÉ SAREL LIEBENBERG**

A registered student at university of South Africa at doctoral level  
(National Diploma, B-Tech, M-Tech)

**DATE: 2 OCTOBER 2019**

**RECOMMENDED**



**ANDRÉ LIEBENBERG  
EXECUTIVE INTERNATIONAL FORENSICS INVESTIGATOR  
OWNER – ATEC TRADING**

**DATE: 2 OCTOBER 2019**

**APPROVED / NOT-APPROVED**



---

**ROY ROBERTSON  
PRINCIPLE DIRECTOR  
COMBINED PRIVATE INVESTIGATIONS (CPI) : FORENSIC INVESTIGATORS**

**ANNEXURE D: PERMISSION TO CONDUCT RESEARCH IN SAPS:  
MPUMALANGA**

SAP 21

**SUID-AFRIKAANSE POLISIEDIENS**



**SOUTH AFRICAN POLICE SERVICE**

Privaatsak / Private Bag X11299 NELSPRUIT 1200

Verwysing Reference	3/34/2
Navrae Enquiries	Brigadier Griffiths Lt Col Mashele
Telefoon Telephone	013 762 4711
Faksnommer Fax number	086 586 5936

The Provincial Commissioner  
South African Police Service  
**MPUMALANGA**

- A.** Division: Research  
South African Police Service  
**PRETORIA**  
**0001**
- B.** A S Liebenberg

**PERMISSION TO CONDUCT RESEARCH IN SAPS: AN EVALUATION OF THE IMPACT OF THE NON-FERROUS METALS CRIME COMBATTING COMMITTEE ON COPPER THEFT: UNIVERSITY OF SOUTH AFRICA: DOCTORATE DEGREE: RESEARCHER: AS LIEBENBERG**

- A.1 Your letter with reference no: 3/34/2 dated 2019-11-20 refers.
2. Permission is hereby granted for A S Liebenberg to conduct research in relation to the above mentioned topic.
3. The contact person is Lt Col Mashele. Contact details:  
(013 762 4711) Cell: 079 692 0670 and email address: MasheleS2@saps.gov.za.  
\*\*\*\*\*
- B.1 Approval is hereby granted for you to conduct the research in the Province.
2. The contact person is Lt Col Mashele. Contact details:  
(013 762 4711) Cell: 079 692 0670 and email address: MasheleS2@saps.gov.za.

Kind regards.

.....: LIEUTENANT GENERAL  
PROVINCIAL COMMISSIONER: MPUMALANGA PROVINCE  
**B M ZUMA**

Date: 2019 -12- 0 2

**ANNEXURE E: DECLARATION BY INDEPENDENT CODER**

**SS Terblanche (Ph.D)  
27 Seascope  
Acacias Street  
Somerset West  
2130**

**DECLARATION BY INDEPENDENT CODER**

I, Susanna S. Terblanche, confirm that I

- had access to the transcripts of the data obtained through this study;
- did not have access to any information that could enable me to identify the participants; and
- adhered to the agreement of confidentiality relating to the data obtained.

Signed at Somerset West on 17 Aug 2020  
(place) (date)

SSTerblanche  
Signature of independent coder

[Signature]  
Signature of witness

*I the undersigned certify that the statement was affirmed before me and the deponent's signature was placed thereon in my presence.*

Signed and affirmed by [Signature] CST  
K. MANANA 7215103-0

On 2020-08-17 at 10:36





## ANNEXURE F: ETHICS APPROVAL



### UNISA CLAW ETHICS REVIEW COMMITTEE

**Date** 20190920

**Reference:** STF 109 of 2019

**Applicant:** AS Liebenberg

**Dear** AS Liebenberg

**Decision: ETHICS APPROVAL**

FROM 01 August 2019

TO 01 August 2022

**Researcher:** ANDRÉ SAREL LIEBENBERG

**Supervisor:** Dr J van Graan

**An Evaluation of the Impact of the Non-Ferrous Metals Crime Combating Committee On Copper Theft**

**Qualification:** Phd Criminal Justice

Thank you for the application for research ethics clearance by the Unisa CLAW Ethics Review Committee for the above mentioned research. Ethics approval is granted for 3 years.

*The CLAW Ethics Review Committee reviewed the **low risk application** on 1 September 2019 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment. The decision was ratified by the committee.*

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the CLAW Committee.



3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
7. No research activities may continue after the expiry date **1 September 2022**. Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

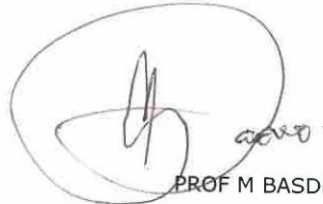
*Note:*

*The reference number STF 109 of 2019 should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Yours sincerely,



PROF T BUDHRAM  
Chair of CLAW ERC  
E-mail: [budhrt@unisa.ac.za](mailto:budhrt@unisa.ac.za)  
Tel: (012) 433-9462



PROF M BASDEO  
Executive Dean : CLAW  
E-mail: [MBasdeo@unisa.ac.za](mailto:MBasdeo@unisa.ac.za)  
Tel: (012) 429-8603

# ANNEXURE G: APPROVAL TO CONDUCT RESEARCH IN THE DEPARTMENT OF CORRECTIONAL SERVICES



## correctional services

Department:  
Correctional Services  
REPUBLIC OF SOUTH AFRICA

Private Bag X136, PRETORIA, 0001 Poyntons Building, C/O WF Nkomo and Sophie De Bruyn Street, PRETORIA  
Tel (012) 307 2770

**Mr AS Liebenberg**  
**University of South Africa**  
**Preller Street**  
**Muckleneuk Ridge**  
**0003**

Dear Mr AS Liebenberg

**RE: APPLICATION TO CONDUCT RESEARCH IN THE DEPARTMENT OF  
CORRECTIONAL SERVICES ON: "AN EVALUATION OF THE IMPACT OF THE NON-  
FERROUS METALS CRIME COMBATING COMMITTEE ON COPPER THEFT"**

It is with pleasure to inform you that your request to conduct research in the Department of Correctional Services on the above topic has been approved.

Your attention is drawn to the following:

- This ethics approval is valid from **13 December 2019 to 12 December 2021**.
- The relevant Regional and Area Commissioners where the research will be conducted will be informed of your proposed research project.
- Your internal guide will be **Ms S Moodley, Acting Director, Risk Profile Management, Head Office**.
- You are requested to contact her at telephone number (012) 307 2416 before the commencement of your research.
- It is your responsibility to make arrangements for your interviewing times.
- Your identity document/passport and this approval letter should be in your possession when visiting the Correctional Centre.
- You are required to use the terminology used in the White Paper on Corrections in South Africa (February 2005) and the Correctional Services Act (No.111 of 1998) e.g. "Offenders" not "Prisoners" and "Correctional Centres" not "Prisons".
- You are not allowed to use photographic or video equipment during your visits, however the audio recorder is allowed.
- You are required to submit your final report to the Department for approval by the Commissioner of Correctional Services before publication (including presentation at workshops, conferences, seminars, etc) of the report.
- Should you have any enquiries regarding this process, please contact the DCS REC Administration for assistance at telephone number (012) 307 2463.

Thank you for your application and interest to conduct research in the Department of Correctional Services.

Yours faithfully

**ND MBULI**  
**DC: POLICY COORDINATION & RESEARCH**  
**DATE: 11/12/2019**

## **ANNEXURE H: INTERVIEW SCHEDULE POLLSMOOR CORRECTIONAL FACILITY**

### **INTERVIEW SCHEDULE** **POLLSMOOR CORRECTIONAL FACILITY**

#### **AN EVALUATION OF THE IMPACT OF THE NON-FERROUS METALS CRIME COMBATING COMMITTEE ON COPPER THEFT**

1. Are you aware of the damage caused to essential infrastructure and the impact on basic services and the economy resulting from copper cable theft?
2. Did you pre-select a particular site to commit copper cable theft or not?
  - Why did you select the specific target site?
3. Did you receive information about the target site prior to the copper theft from anyone?
  - If affirmative, what was your relationship with this person?
  - If affirmative, what type of information did you receive prior to the copper theft from the person mentioned above?
4. Did you plan the copper cable theft prior to execution?
5. Have you received any form of "training" in preparation to execute copper cable theft?
  - If affirmative, who provided the "training" and what did it involved?
  - If not, where did you obtained your knowledge?
6. Did you commit the crime on your own or did you have accomplices?
7. What method/s of transportation did you use to reach and depart from your target site before and after the copper theft was committed?
8. What factor/s are the biggest deterrent at a particular site that influence your decision to steal copper cable?
9. From your experience, is the South African Police Service and other relevant role-players effective in addressing copper cable theft? Please motivate your answer?
10. In your opinion, is copper cables efficiently secured in South Africa?

- If affirmative, how does copper thieves bypass theft preventative measures?
  - If not, what preventative measures could be implemented to reduce copper cable theft?
11. Did you take any precautionary measures before or after the copper theft in an attempt to obstruct the criminal investigation?
  12. Were you a member of a syndicate/gang at the time of the copper cable theft or did you act independently?
  13. How did you dispose of the stolen copper?
  14. When you are released, will you commit copper cable theft again and why?

## ANNEXURE I: INTERVIEW SCHEDULE: NFMCCC, BACSA & CPI

### AN EVALUATION OF THE IMPACT OF THE NON-FERROUS METALS CRIME COMBATING COMMITTEE ON COPPER THEFT

IN-DEPTH INTERVIEW ONE-ON-ONE AT \_\_\_\_\_ : CODE

.....

DATE:

RESPONDENT.....

Question 1:

In your own words, explain the aims and objectives of the NFMCCC?

Question 1.1

From your experience, does the NFMCCC achieve its aims and objectives to combat copper cable theft?

Question 1.2

If not, why not? If affirmative, please motivate your answer?

Question 2:

Do you have a clear understanding and knowledge surrounding the strategies of the NFMCCC to combat copper cable theft in South Africa.

Question 2.1

If affirmative, please explain these strategies?

Question 3:

From your experience, does the NFMCCC engage in multi-faceted co-operative relationships, interaction and working agreements with stakeholders to facilitate identify and sustain policing strategies to combat copper cable theft?

Question 3.1

If not, why not?

Question 3.2

If affirmative, please explain how these cooperative relationships interaction and working agreements take effect? Are these cooperative relationships successful or not?

Question 3.3

How would you describe the operational relationship between the NFMCCC and other stakeholders?

Question 3.4

From your experience, what factors hinder the successful implementation of policing strategies implemented by the NFMCCC to address copper theft?

**Question 4:**

In your opinion, does the provincial NFMCCCs share information with one another and other stakeholders to efficiently operationalise initiatives to combat copper cable theft?

**Question 4.1**

If affirmative, please explain how information is shared among these stakeholders?

**Question 4.2**

If not, why not?

**Question 4.3**

What is the impact of not sharing information among stakeholders?

**Question 5:**

According to you, does the NFMCCC monitor and coordinate crime-combating operations with the focus on the suppliers, dealers and end-users, as per its mandate?

**Question 5.1**

If affirmative, please explain how coordination of these crime-combating operations take place?

**Question 5.2**

If not, please motivate your answer?

**Question 6:**

In your opinion, is the mandate of the NFMCCC operationalized in an integrated manner to address copper cable theft effectively?

**Question 7:**

From your experience, does the NFMCCC continuously monitor and evaluate its strategies to determine its impact on combating copper cable theft?

**Question 7.1**

If affirmative, how are these strategies evaluated?

**Question 7.2**

If not, please motivate your answer?

**Question 7.3**

Does the NFMCCC continuously develop and implement strategies to address identified shortcomings or to improve on existing strategies?

**Question 8:**

According to you, what is the impact of the NFMCCC on copper cable theft in terms of the forum's current efficiency and functionality?

**Question 8.1**

If affirmative, please motivate your answer?

**Question 8.2**

If not, please motivate your answer? How could the efficiency and functionality of the NFMCCC be enhanced?

**Question 9:**

Does the NFMCCC conduct crime threat analyses to determine copper cable crime trends?

**Question 9.1**

If affirmative, how often are these crime threat analyses conducted?

**Question 9.2**

How does the NFMCCC act upon identified crime threat analysis?

**Question 9.3**

Are subsequent interventions identified and implemented? Are these interventions successful or not?

**Question 9.4**

If not, please motivate your answer?

**Question 10:**

In your opinion, is the NFMCCC an efficient link between police stations, government departments and other stakeholders?

**Question 11:**

From your experience, does the NFMCCC implements and maintains efficient mechanisms, for example, training of investigators and other stakeholders for the effective identification and investigation of non-ferrous metals?

**Question 11.1**

If affirmative, are these mechanisms effective?

**Question 11.2**



If not, please motivate your answer?

**Question 12:**

Does the NFMCCC experience internal or external challenges that hinder the implementation of effective policing strategies to address copper theft?

**Question 12.1**

If affirmative, explain these internal or external challenges? What mechanisms are in place to overcome internal or external challenges for the successful implementation of these policing strategies?

**Question 12.2**

If not, please motivate your answer?

**Question 13:**

In your opinion, are the NFMCCCs sufficiently resourced in terms of physical and human resources to combat copper cable theft?

**Question 13.1**

Please motivate your answer?

**Question 14:**

From your experience, do formal, standardised communication procedures exist between the SAPS, NFMCCC and other role players?

**Question 14.1**

If affirmative, are these communication procedures efficient?

**Question 14.2**

If not, please motivate your answer?

**Question 15:**

In your opinion, is the NFMCCC appropriately coordinated to efficiently address copper cable theft?

**Question 15.1**

Please motivate your answer?

**Question 16:**

From your experience, does the NFMCCC function optimally? Please motivate your answer.

## ANNEXURE J: PERMISSION TO CONDUCT RESEARCH IN SAPS: PRETORIA

SUID-AFRIKAANSE POLISIEDIENS  SOUTH AFRICAN POLICE SERVICE

**Privaatsak/Private Bag X 94**

Verwysing/Reference:	3/34/2
Navrae/Enquiries:	Lt Col Joubert AC Thenga
Telefoon/Telephone:	(012) 393 3118
Email Address:	JoubertG@saps.gov.za

THE HEAD: RESEARCH  
SOUTH AFRICAN POLICE SERVICE  
PRETORIA  
0001

- A. The National Head  
**DIRECTORATE FOR PRIORITY CRIME INVESTIGATION**
- B. The Provincial Commissioner  
**WESTERN CAPE**
- C. The Provincial Commissioner  
**GAUTENG**
- D. The Provincial Commissioner  
**MPUMALANGA**

**PERMISSION TO CONDUCT RESEARCH IN SAPS: AN EVALUATION OF THE IMPACT OF THE NON-FERROUS METALS CRIME COMBATING COMMITTEE ON COPPER THEFT: UNIVERSITY OF SOUTH AFRICA: DOCTORATE DEGREE: RESEARCHER: AS LIEBENBERG**

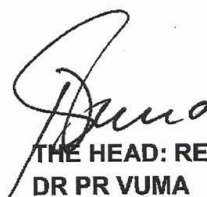
- A-D. 1. The above subject matter refers.
- 2. The researcher, Mr AS Liebenberg, is conducting a study: An Evaluation of the impact of the non-ferrous metals crime combatting committee on copper theft, with the aim *to evaluate the impact of the Non-Ferrous Metals Crime Combating Committee on copper theft.*
- 3. The researcher is requesting permission to interview members of the Non-Ferrous Metals Crime Combating Committee in the following three (3) Provinces: Western Cape, Gauteng and Mpumalanga. Ten (10) respondents per province will be interviewed.

**PERMISSION TO CONDUCT RESEARCH IN SAPS: AN EVALUATION OF THE  
IMPACT OF THE NON-FERROUS METALS CRIME COMBATING COMMITTEE ON  
COPPER THEFT: UNIVERSITY OF SOUTH AFRICA: DOCTORATE DEGREE:  
RESEARCHER: AS LIEBENBERG**

4. The proposal was perused according to National Instruction 1 of 2006. This office recommends that permission be granted for the research study, subject to the final approval and further arrangements by the office of National Head: Directorate for Priority Crime Investigation and the offices of the Provincial Commissioners: Western Cape, Gauteng and Mpumalanga. 1
5. We hereby request the final approval by your office if you concur with our recommendation. Your office is also at liberty to set terms and conditions to the researcher to ensure that compliance standards are adhered to during the research process and that research has impact to the organisation.
6. If approval is granted by your office, this office will obtain a signed undertaking from researcher prior to the commencement of the research which will include your terms and conditions if there are any and the following:
  - 6.1. The research will be conducted at his/her exclusive cost.
  - 6.2. The researcher will conduct the research without the disruption of the duties of members of the Service and where it is necessary for the research goals, research procedures or research instruments to disrupt the duties of a member, prior arrangements must be made with the commander of such member.
  - 6.3. The researcher should bear in mind that participation in the interviews must be on a voluntary basis.
  - 6.4. The information will at all times be treated as strictly confidential.
  - 6.5. The researcher will provide an annotated copy of the research work to the Service.
  - 6.6. The researcher will ensure that research report / publication complies with all conditions for the approval of research.

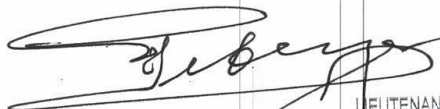
**PERMISSION TO CONDUCT RESEARCH IN SAPS: AN EVALUATION OF THE  
IMPACT OF THE NON-FERROUS METALS CRIME COMBATING COMMITTEE ON  
COPPER THEFT: UNIVERSITY OF SOUTH AFRICA: DOCTORATE DEGREE:  
RESEARCHER: AS LIEBENBERG**

7. If approval is granted by your office, for smooth coordination of research process between your office and the researcher, the following information is kindly requested to be forwarded to our office:
  - **Contact person:** Rank, Initials and Surname.
  - **Contact details:** Office telephone number and email address.
8. A copy of the approval (if granted) and signed undertaking as per paragraph 6 supra to be provided to this office within 21 days after receipt of this letter.
9. Your cooperation will be highly appreciated.

  
**MAJOR GENERAL**  
**THE HEAD: RESEARCH**  
**DR PR VUMA**

**DATE:** 2019 -11- 20

*Approved.*



2019 -11- 27  
LEUTENANT GENERAL  
NATIONAL HEAD: DIRECTORATE FOR PRIORITY  
CRIME INVESTIGATION  
(DR/ADV) S. LEBEYA (SOEG)

**ANNEXURE K: PERMISSION TO CONDUCT RESEARCH IN SAPS:  
GAUTENG**

SAPS 21

SUID-AFRIKAANSE POLISIEDIENS



SOUTH AFRICAN POLICE SERVICE

Private Bag / Privaatsak X 57, BRAAMFONTEIN, 2017

<b>Reference Verwysing</b>	3/34/2(201900070)
<b>Enquiries Navrae</b>	Col. Peters Intern Nenzhelele
<b>Telephone Telefoon</b>	(011) 547-9129
<b>Fax number Faksnommer</b>	(011) 547- 9189

**THE PROVINCIAL COMMISSIONER  
GAUTENG**

**2019-11-28**

- A. The Provincial Head  
Legal and Policy Services  
S A Police Service  
**GAUTENG**
- B. The Deputy Provincial Commissioner  
Policing  
S A Police Service  
**GAUTENG**
- C. The Provincial Commissioner  
S A Police Service  
**GAUTENG**

**PERMISSION TO CONDUCT RESEARCH IN SAPS: AN EVALUATION OF THE IMPACT OF THE NON-FERROUS METALS CRIME COMBATING COMMITTEE ON COPPER THEFT: UNIVERSITY OF SOUTH AFRICA: DOCTORATE DEGREE: RESEARCHER: AS LIEBENBERG**

- A-B: For your recommendation
- C: For approval

1. Attached herewith is an application of AS Liebenberg to conduct research on the above mentioned topic, within the South African Police Service.
2. The application has been evaluated by Provincial Strategic Management (Research) as per attached Annexure and found to be in compliance with National Instruction 1 of 2006: Research.
3. In the opinion of Strategic Management (Research), the research study will be beneficial to the Service as it aims to evaluate the impact of the Non-Ferrous Metal Crime Combating Committee on copper theft.
4. The researcher will conduct the study without disrupting the duties of members of the Service. Prior arrangements will be made with the commander of the applicable business unit.

**PERMISSION TO CONDUCT RESEARCH IN SAPS: AN EVALUATION OF THE IMPACT OF THE NON-FERROUS METALS CRIME COMBATING COMMITTEE ON COPPER THEFT: UNIVERSITY OF SOUTH AFRICA: DOCTORATE DEGREE: RESEARCHER: AS LIEBENBERG**

5. The research study will be conducted at the researcher's exclusive cost.
6. In line with National Instruction 1 of 2006, you are afforded the opportunity to comment on the relevance and feasibility of the proposed research within your area of responsibility. Any objections against the research will be noted and you will be requested to clarify and motivate those with the Provincial Head: Organisational Development & Strategic Management.
7. In order to ensure the effective and efficient finalisation of this application you are requested to submit your comments to the Strategic Management office within the allocated time frame.
8. Your cooperation and assistance is appreciated.

Regards



Colonel

**NS Peters**

**BRIGADIER**

f/ **PROVINCIAL HEAD: ORGANISATIONAL DEVELOPMENT & STRATEGIC  
MANAGEMENT: GAUTENG**

**DF-BENDER**

Date: 2019-11-28

## ANNEXURE A

**PERMISSION TO CONDUCT RESEARCH IN SAPS: AN EVALUATION OF THE IMPACT OF THE NON-FERROUS METALS CRIME COMBATING COMMITTEE ON COPPER THEFT: UNIVERSITY OF SOUTH AFRICA: DOCTORATE DEGREE: RESEARCHER: AS LIEBENBERG**

**COMMENTS & RECOMMENDATION: PROVINCIAL STRATEGIC MANAGEMENT: RESEARCH**

i	OFFICIAL FILE NO:	3/34/2(201900070)		
	FILE COMPUTER REFERENCE NO:	8074524		
ii	MOTIVATION FOR RESEARCH:	To investigate factors that hinder the implementation of effective policing strategies to address copper theft.		
	APPLICATION FOUND TO BE COMPLETE:	<del>YES</del>		NO
	INDEMNITY / UNDERTAKING SIGNED	<del>YES</del>		NO
iii	APPLICATION PERUSED BY:	Intern Nenzhelele		
	CONTACT NO:	011 547 9129		
	SIGNATURE:	<i>Nenzhelele</i>		
	DATE:	2019-11-28		
iv	APPLICATION VERIFIED BY:	<i>lt Col J. Ebebet</i>		
	APPLICATION RECOMMENDED:	YES <input checked="" type="checkbox"/>		NO
	CONTACT NO:	011 547 9129		
	SIGNATURE:	<i>[Signature]</i>		
	DATE:	2019-11-28		

**PERMISSION TO CONDUCT RESEARCH IN SAPS: AN EVALUATION OF THE IMPACT OF THE NON-FERROUS METALS CRIME COMBATING COMMITTEE ON COPPER THEFT: UNIVERSITY OF SOUTH AFRICA: DOCTORATE DEGREE: RESEARCHER: AS LIEBENBERG**

**A. RECOMMENDATION BY PROVINCIAL HEAD: LEGAL AND POLICY SERVICES**

*TIME ALLOCATED: 3 days*

<b>COMMENTS WITH REGARDS TO ANY LEGAL OBJECTIONS AGAINST THE RESEARCH WITH ANY ADDITIONAL LIMITATIONS TO RESEARCHER:</b>			
APPLICATION RECOMMENDED:	YES	<input checked="" type="checkbox"/>	NO
SIGNATURE: <i>[Signature]</i>	DATE:	<i>2019/11/29</i>	

**B. RECOMMENDATION BY THE DEPUTY PROVINCIAL COMMISSIONER: POLICING**

*TIME ALLOCATED: 3 days*

<b>COMMENTS WITH REGARDS TO THE RELEVANCE AND FEASIBILITY OF THE RESEARCH WITHIN YOUR ENVIRONMENT</b>			
APPLICATION RECOMMENDED:	YES	<input checked="" type="checkbox"/>	NO
SIGNATURE: <i>[Signature]</i> JT PHARASI	DATE:	<i>2019/11/29</i>	





**PERMISSION TO CONDUCT RESEARCH IN THE SAPS**

**PERMISSION TO CONDUCT RESEARCH IN SAPS: AN EVALUATION OF THE IMPACT OF THE NON-FERROUS METALS CRIME COMBATING COMMITTEE ON COPPER THEFT: UNIVERSITY OF SOUTH AFRICA: DOCTORATE DEGREE: RESEARCHER: AS LIEBENBERG**

**RESEARCHER: AS LIEBENBERG**

Permission is hereby granted to the researcher above to conduct research in the SAPS based on the conditions of National Instruction 1 of 2006 (as handed to the researcher) and within the limitations as set out below and in the approved research proposal.

This permission must be accompanied with the signed Indemnity, Undertaking & Declaration and presented to the commander present when the researcher is conducting research.

This permission is valid for a period of Twelve (12) months after signing.


Any enquiries with regard to this permission must be directed to Col. Peters or Intern Nenzhelele at [PetersNS@saps.gov.za](mailto:PetersNS@saps.gov.za)/[etsebethj@saps.gov.za](mailto:etsebethj@saps.gov.za)

**RESEARCH LIMITATIONS / BOUNDARIES:**

**Research Instruments:** Interview  
**Target audience/subjects:** Members from the Non-Ferrous Metal Crime Combatting Committee  
**Geographical target:**

<i>Provincial Component</i>	<i>Province</i>
Visible Policing	Gauteng

Access to official document: No

  
 LIEUTENANT GENERAL  
 PROVINCIAL COMMISSIONER: GAUTENG  
 E MAWELA (SOEG)  
 DATE: 2019/12/04

## ANNEXURE L: UNISA COVID-19 POSITION STATEMENT ON RESEARCH ETHICS



*Prof T Meyiwa*  
P. O. Box 392, UNISA, 0003  
TELE: +27 (0) 12 429 2851  
EMAIL: [meyjw@unisa.ac.za](mailto:meyjw@unisa.ac.za)

---

**TO: ALL RESEACHERS**

**DATE: 09 April 2020**

**SUBJECT: UNIVERSITY OF SOUTH AFRICA COVID-19 POSITION STATEMENT ON RESEARCH ETHICS**

---

Dear Colleagues

On 15 March 2020 President Cyril Ramaphosa addressed the nation to declare a state of national disaster, following an increase in confirmed cases of COVID-19. The evolving COVID-19 pandemic requires that research is adapted on an ongoing basis to the dynamic situation.

A responsible approach to human participant, community engaged, animal, environmental, molecular and cell research is required in the context of COVID-19. Unisa supports the continuation of research activities, where possible, guided by the following principles and activities supported by the Policy on Research Ethics:

Protection of the participant, the community, and the researcher(s) and research support staff from any risks of harm while conducting research through the implementation of clear pragmatic risk mitigation measures.

Researchers must assess the risk - benefit ratio of a research study, particularly research that requires face-to-face contact, and the collection of data in public spaces or in locations where social distancing cannot be practiced.

The respect for the participant's rights for self-determination should always be carefully considered, for example the right to decline participation or to withdraw or collectively exploring alternative ways of participation.

In the interest of participants and researchers, the consensus is that new face-to-face or studies with an inherent risk to participants and/or researchers should not be embarked upon for the duration of the lockdown period.

Although this sounds like a blanket statement, registered Unisa Health Research Ethics Review Committees would be willing to consider well-motivated applications as exceptions only. The researcher needs to provide an accompanying letter with a detailed rationale for why this research study needs to be enacted during this time.

Unisa Ethics Review Committees (ERCs) will continue to accept and review research ethics applications but will clearly indicate where the ERC does NOT wish this study to commence with immediate effect in accordance with the lockdown regulations.

No research involving face-to-face contact or research studies involving settings where it is difficult to institute social distancing or practice protective measures may continue without formal notification and approval by the ERC that granted the approval in consultation with one of Unisa's registered Health ERCs/RECs.

Where or when it is unavoidable to reduce, suspend or postpone research activities, the onus is on the principal researcher to notify the ERC that approved the research study and to provide a rationale why the research needs to continue.

The ERC must inform the Unisa Research Ethics Review Committee (URERC) of all ongoing studies that may pose a risk of harm relating to the Covid-19 pandemic. National instituted protective measures such as hand hygiene, cough etiquette, and social distancing should be implemented, and monitored at sites where these studies will continue.

Research for degree purposes: The College of Graduate Studies and the Heads: Graduate Studies and Research will negotiate processes to mitigate the possible negative fallout to student progress (both new research and research that is in progress). The COVID-19 outbreak and its ramifications are difficult to measure or predict, but the suggested time frame for this position statement to be enacted is not less than the lockdown period.

Staff, researchers and supervisors are requested to carefully monitor any further internal communications for directives and guidance on this matter. Researchers who are dependent on internal, and more so external, sources of funding and sponsorship should consider the potential risks that COVID-19 and social distancing strategies will have on project milestones and audit reporting deadlines. Where possible, researchers should engage with the funder/sponsor regarding these timeframes.

### Approved research that may continue without ERC notification

- Research conducted by Unisa researchers that does not engage participants face-to-face and thus limits or does not pose the risk of COVID-19 infection may continue without ERC notification.
- Research studies that collect data online or consists of the review of records are considered of low risk in current circumstances and may continue.
- Data science research and other forms of research that does not require face-to-face interaction may continue.
- Laboratory-based research where appropriate safety precautions can be taken and legitimate access to the facilities negotiated may continue (except research related to COVID-19).

The researcher/s remain responsible to ensure safety and protective measures, and to continue to minimise risk.

The onus is on the researcher to contact the relevant Ethics Review Committee if uncertain or concerned about how, or if at all, to proceed with approved research studies.

Kind regards



Prof T Meyiwa

Vice Principal: Research, Postgraduate Studies, Innovation and Commercialisation

### Acknowledgement:

*Stellenbosch University (SU) Faculty of Medicine and Health Sciences (FMHS) Researchers' Position Statement on Research Involving Human Participants (Clinical Research), 6 April 2020*