

**THE VALUE OF VEHICLE TRACKING TECHNOLOGY IN THE RECOVERY OF  
STOLEN MOTOR VEHICLES**

by

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I declare that **THE VALUE OF VEHICLE TRACKING TECHNOLOGY IN THE RECOVERY OF STOLEN MOTOR VEHICLES** is my own work and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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WA SENEKAL

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DATE

## **DIE ONSE VADER**

*Ons Vader wat in die hemel is, laat u Naam geheilig word;  
laat u koninkryk kom; laat u wil geskied, soos in die hemel  
net so ook op die aarde; gee ons vandag ons daaglikse brood;  
en vergeef ons skulde, soos ons ook ons skuldenaars  
vergewe; en lei ons nie in versoeking nie, maar verlos ons van  
die Bose. Want aan U behoort die koninkryk en die krag en die  
heerlikheid tot in ewigheid. Amen.*

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## **DEDICATION**

I dedicate this dissertation to Heidi.

## **ABSTRACT**

In this study, the research problem sought to explore, identify and acknowledge the value of vehicle tracking technology within the South African Police Service (SAPS). National legislation in the Republic of South Africa allows the SAPS and private organisations, such as Tracker, to create partnerships to successfully combat crime, such as vehicle related crimes.

Data was collected by means of a literature study, together with semi-structured interviews that were individually conducted with non-commissioned officers of the SAPS: West Rand Flying Squad. These members are deployed daily, in an operational environment, to deal with the recovery of stolen and robbed motor vehicles; they utilise vehicle tracking technology to fulfil this function. A detailed study of literature relating to national legislation, SAPS directives, media and newspaper reports as well as library resources and international studies was conducted.

The research indicates the importance of vehicle tracking technology in assisting specialised units within the SAPS to successfully and efficiently track and locate stolen or robbed motor vehicles. It is evident that the use of this type of technology has become an invaluable tool to the SAPS: West Rand Flying Squad members in their daily duties. Furthermore, members at grassroots level understand and appreciate the assistance and value of technology, especially as the technology enables them to effectively recover stolen or robbed motor vehicles, and to successfully arrest the perpetrators responsible for these thefts.

The recommendations made in this study may provide a number of solutions to the South African government, SAPS, insurance industry and the general public, regarding the value of vehicle tracking technology. In addition, the study indicates how this technology can effectively assist in curbing vehicle crimes and the recovery of stolen or robbed motor vehicles; in the process, recovery affects the arrests of criminals, thus saving the economy a significant amount of money due to crimes of this nature.

## **KEY TERMS**

Vehicle theft; vehicle robbery; vehicle tracking; vehicle tracking technology; stolen motor vehicles; robbed motor vehicles; recovery of stolen motor vehicles; recovery of robbed motor vehicles; Tracker.

## **LIST OF ABBREVIATIONS**

<b>ATM</b>	Automatic Teller Machine
<b>ECA</b>	Electronic Communications Act
<b>EU</b>	European Union
<b>FBI</b>	Federal Bureau of Investigation
<b>GP</b>	Gauteng Province
<b>GPS</b>	Global Positioning System
<b>GSM</b>	Global System for Mobile Communications
<b>ICASA</b>	Independent Communications Authority of South Africa
<b>IAATI</b>	International Association of Auto Theft Investigators
<b>INTERPOL</b>	International Police
<b>ISO</b>	International Standard of Operation
<b>ISS</b>	Institute for Security Studies
<b>LELO</b>	Law Enforcement Liaison Officer
<b>MOU</b>	Memorandum of Understanding
<b>NAAMSA</b>	National Association of Automobile Manufacturers of South Africa
<b>NaVICC</b>	National Vehicle Information Control Center
<b>NECC</b>	National Emergency Call Center
<b>NPA</b>	National Prosecuting Authority
<b>ORS</b>	Operational Response Services
<b>PES</b>	Police Emergency Services
<b>PSIRA</b>	Private Security Industry Regulatory Authority

<b>RF</b>	Radio Frequency
<b>RICA</b>	Regulation of Interception of Communications and Provision of Communication Related Information Act
<b>SA</b>	South Africa
<b>SABS</b>	South African Bureau of Standards
<b>SADC</b>	South African Development Community
<b>SARPCCO</b>	Southern African Regional Police Chiefs Co-operation Organisation
<b>SAPS</b>	South African Police Service
<b>SMV</b>	Stolen Motor Vehicle
<b>SOP</b>	Standard Operating Procedure
<b>SVR</b>	Stolen Vehicle Recovery
<b>SUV</b>	Small Utility Vehicle
<b>TRT</b>	Tactical Response Team
<b>TU</b>	Tracking Unit
<b>VDS</b>	Vehicle Descriptor Section
<b>VIN</b>	Vehicle Identification Number
<b>VIS</b>	Vehicle Identification Section
<b>VTU</b>	Vehicle Tracking Unit
<b>WMI</b>	World Manufacturer Identifier
<b>UK</b>	United Kingdom
<b>USA</b>	United States of America

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## **CHAPTER 1 OVERVIEW OF THE STUDY**

### **1.1 INTRODUCTION**

According to Terp (in Stauffer & Bonfanti, 2006:505), the rapid acceleration of technology such as vehicle tracking technology has provided law enforcement agencies with the ability to track, locate and recover stolen or robbed motor vehicles. This statement is supported by Weber (2009:217) who states that vehicle tracking devices are an effective method to quickly and accurately locate stolen or robbed motor vehicles and reunite them with their owners; these devices are also referred to as ‘after theft systems’. Terp (in Stauffer & Bonfanti, 2006:505) further mentions that vehicle tracking devices assist law enforcement agencies to track, locate and recover stolen and robbed motor vehicles immediately or within a relatively short period after the theft or robbery. According to these authors, the main reason for utilising vehicle tracking technology is to track, locate and recover stolen or robbed motor vehicles as soon as possible. This study explores the value of vehicle tracking technology in the tracking and recovery of stolen motor vehicle.

### **1.2 BACKGROUND TO THE STUDY**

Tracker Connect (Pty) Ltd (“Tracker”) was established in 1996 with the objective of utilising vehicle tracking technology to recover stolen or robbed motor vehicles. The company started after the American LoJack Corporation, a National Association of Securities Dealers Automated Quotations (NASDAQ) listed company, issued an operating licence to conduct business in South Africa (SA).

The LoJack Corporation originally developed Tracker vehicle tracking technology which, in fact, brought the vehicle tracking industry to the world in 1986. This technology has spread to some 38 countries throughout the globe. The success of vehicle tracking technology in the United States of America (USA) has sparked interest around the world.

LoJack vehicle tracking systems are presently in operation under licensing agreements in the following countries: Argentina, Bahamas, Belgium, Belize, Botswana, Brazil, Canada, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, France, Guatemala, Honduras, Ireland (LoJack International HQ), Italy, Lesotho, Luxembourg, Mexico, Mozambique, Netherlands, Namibia, Nicaragua, Panama, Paraguay, Peru, Poland, Puerto

Rico, South Africa, Spain, Portugal, Swaziland, Trinidad & Tobago, United Kingdom (UK), USA and Uruguay.

At the time of this study, Tracker had a subscriber base in excess of 850 000 motor vehicles . Tracker was one of the first companies in SA to provide vehicle tracking technology to recover stolen motor vehicles. In 1997, the South African Police Service (SAPS) and Tracker entered into a formal agreement to partner in the prevention of vehicle related crime. Tracker is also the only vehicle tracking company in SA to formally partner with the SAPS in order to combat vehicle related crime. Tracker's mandate is to recover stolen and robbed motor vehicles, thus, the company only deals with criminal matters and will only activate a vehicle tracking unit for civil purposes if instructed to do so by a court of law.

Tracker has three major vehicle tracking technology units:

- Tracker Retrieve: A passive stolen vehicle recovery unit that transmits a radio frequency signal from a transponder unit hidden within or outside of the vehicle, enabling SAPS motor vehicles fitted with Tracker tracking technology, as well as Tracker Operational Response Services, to track and locate a stolen or hijacked vehicle.
- Tracker Alert: Detects unwarranted movement that is triggered when there is any form of movement at the vehicle i.e. unauthorised starting of engine or door tampering.
- Tracker Skytrax: A web based Global Positioning System (GPS)/Global System for Mobile Communications (GSM) unit used for fleet management and stolen vehicle recovery. This system is an active (live) system.

The Operational Response Services Department of Tracker was established in 1997. It was mandated to assist the SAPS in the tracking and recovery of stolen and robbed motor vehicles fitted with Tracker vehicle tracking technology. At the time of the study, a total of 900 Vehicle Tracking Units (VTU) were being utilised operationally by the SAPS. All border posts neighbouring SA are equipped with Tracker vehicle tracking technology, as are all SAPS aircraft. Tracker is the only vehicle tracking company that shares a unique partnership with the SAPS, which allows both Tracker and the SAPS to work in synergy in order to effectively combat vehicle related crime.

### 1.3 PROBLEM STATEMENT

Before research can be conducted on a specific topic, it is of utmost importance for the researcher to know what the problem is and the best way in which to decipher it (Welman, Kruger & Mitchell, 2005:15). Hofstee (2006:85) agrees with Welman et al. (2005:15) as he states that in the problem statement the problem needs to be identified and discussed by asking “what exactly is the problem? Why is it a problem? What factors are there to the problem? What has been done to address the problem, and why is it not satisfactory?”

According to the SAPS Annual Crime Statistics 2013/2014 (South Africa, 2014(c)), released by the Minister of Safety and Security, Nkosinathi Nhleko, on 17 September 2014, it was confirmed that vehicle theft and the subsequent recovery of such motor vehicles is a “significant problem” that poses a significant challenge for the SAPS. In his address on the release of the 2014 SAPS national crime statistics, the Minister emphasised that property crime, such as vehicle theft, is a “stubborn crime”. According to the South African Insurance Crime Bureau (SAICB) (2014(b)), the theft of motor vehicles costs the South African economy a staggering R8.5 billion annually. Putting this figure into perspective, an astounding amount of 156 motor vehicles is stolen every 24 hours (*Wheels 24 (2014). SA vehicle theft: 156 gone in 24 hours.*). According to the SAPS Annual Performance Plan for 2013/2014 South Africa (2014(d):100), a total number of 66 790 motor vehicles were stolen in SA, and only 45 055 of these stolen motor vehicles were recovered during the financial year 1 April 2013 to 31 March 2014. However, only 28 892 recovered motor vehicles could positively be linked to their lawful owners. This Annual Performance Plan South Africa (2014(d):100) further indicates that the SAPS aim to recover 46% of reported stolen motor vehicles

Given the above, the researcher is of the opinion that the use of Tracker vehicle tracking technology could drastically reduce the number of recovered stolen motor vehicles that cannot be linked to their lawful owners. In an online article by Business Tech (2014) (*Using tech to tackle car theft in SA*) it is noted that motor vehicles in South Africa that are fitted with vehicle tracking technology have more than an 80% chance of being recovered, but motor vehicles not fitted with vehicle tracking technology have less than a 10% chance of being recovered. The high recovery rate of stolen and robbed motor vehicles, by means of vehicle tracking technology, is corroborated by the researcher’s experience in the recovery of stolen and robbed motor vehicles, since motor vehicles fitted with vehicle tracking

technology have been more frequently recovered than motor vehicles that are not. This statement is supported by Weber (2009:217) who is of the opinion that stolen and robbed motor vehicles can be more readily and successfully located and re-united with their lawful owners by utilising vehicle tracking technology. When a vehicle has been stolen or robbed from its lawful owner, and such vehicle is not fitted with vehicle tracking technology, the SAPS can only act on the following limited information in an attempt to recover the vehicle:

- The make, model and colour of the vehicle
- The registration number
- Distinguishing marks on the vehicle
- Where and when the vehicle was last seen.

As a result, large numbers of motor vehicles are stolen and not recovered due to the non-utilisation of a vehicle tracking system, which costs the SA economy billions, as stated above. According to Elmes, Roedl and Conley (2014:48), the ability to “track objects through space and time, with the help of vehicle tracking technology, has emerged as a vital component of crime prevention and investigation”, therefore allowing the police to prevent and resolve crime. It is thus important to conduct this research in order to ensure that the general public, the SAPS, insurance companies and government are made aware of, and realise the value in, the use of vehicle tracking technology as a method to recover stolen and robbed motor vehicles. As a result, the stolen motor vehicle recovery rate could improve. This, therefore, addresses the significance of vehicle tracking technology in combatting motor vehicle theft and robbery in SA.

### **1.3.1 Experience in the recovery of stolen motor vehicles by means of vehicle tracking technology**

The researcher has first-hand knowledge of, and experience in excess of 14 years in, the role of vehicle tracking technology and the recovery of stolen motor vehicles. The researcher was first introduced to vehicle tracking by means of vehicle tracking technology in 2000, when he was stationed at the SAPS: Dog Unit in Soweto, Gauteng, which is known for its high rate of stolen and robbed motor vehicles. During this period, the researcher successfully recovered numerous stolen and robbed motor vehicles by utilising the Tracker vehicle tracking technology fitted to SAPS motor vehicles, and the researcher attempted to recover stolen motor vehicles that were not fitted with Tracker vehicle technology. However, the recovery

of such stolen motor vehicles was not as successful as those which used vehicle tracking technology. In addition, the researcher was appointed as a Law Enforcement Liaison Officer (LELO) at Tracker in 2005. The primary function of the researcher was to utilise Tracker vehicle tracking technology to recover stolen and robbed motor vehicles fitted with Tracker vehicle tracking technology. In 2010, the researcher was appointed as the provincial supervisor at Tracker to oversee the day-to-day recovery of stolen and robbed motor vehicles fitted with Tracker's tracking technology within Gauteng and the North West province.

In order to minimise researcher bias, the researcher followed Creswell's (2013:80) instruction that researchers should not be influenced by their own values and assumptions while collecting data and interpreting results. The researcher set aside his own experiences and perceptions, as much as possible, in order to obtain a new perspective on the phenomenon under investigation. As a result, the researcher had described his own experiences with the phenomenon and bracketed out his views before proceeding with the experiences of others.

#### **1.4 AIM OF THE RESEARCH**

Gerring (2012:1) refers to social science research as encompassing the study of human action and behaviour in society. Adams and Schvaneveldt (1991:22) concur with Gerring (2012:1) by stating that social science research is the methodical study of human relations and social conditions. Furthermore, Punch (1998:9) concurs with Adams and Schvaneveldt (1991:22) by indicating that social research is the study of human behaviour in a social context. Mills and Birks (2014:10) summarise the research aim as a statement of intent or that of an anticipated outcome; they propose that the research aim guides the researcher to the research goal. The researcher, therefore, submits that the study of the recovery of stolen motor vehicles by means of vehicle tracking technology is within the ambit of social science research

Welman et al. (2005:192) identify the aims of research as seeking to understand the relationship and connections amongst theories and observable facts, and to ascertain how people experience these. According to Mouton (1996:103), research is aimed at searching for and finding facts, establishing if there is new information and collecting it, as well as determining whether there are interesting trends in this new information. The researcher submits that a simplified way to identify the convergence between the aims of research indicated by Welman et al. (2005:192) and those indicated by Mouton (1996:103) is to lean

on the view of Kalof, Dan and Dietz (2008:26), who state that there is no single approach to doing research, but just several different angles from which to approach it. Welman et al. (2005:192) take the approach that the aim of research is to understand the relationship and links between concepts and facts, and how people encounter these. Mouton (1996:103), however, approaches the aims of research from the perspective of finding facts and new information, and looking for patterns in this new information.

The aim of this study was to explore the value of vehicle tracking technology in the recovery of stolen and robbed motor vehicles .

## **1.5 PURPOSE OF THE RESEARCH**

Welman et al. (2005:22) describe the purpose of research as being three staged: to relate why things are the way they are, to offer a reason or reasons for why things are the way they are, and to predict observable facts about certain issues. Welman et al. (2005:22) agree with Bouma and Ling (2004:6) who indicate that research is conducted to find a means to understand, outline, predict or control some aspect of life. The researcher submits that Bouma and Ling (2004:6) and Welman et al. (2005:22) agree that the purpose of social research is to define, predict, and to relate things that people observe in life. This is further agreed to by Kumar (2011:4) who proposes that research is one of the ways to properly collect reliable information that is trustworthy about the effectiveness of the researcher's interventions, thereby providing evidence of its effectiveness.

The purpose of this research was:

- To explore the value of vehicle tracking technology in the recovery of stolen motor vehicles ;
- To ascertain how vehicle tracking technology will complement the recovery process of a stolen motor vehicle by utilising vehicle tracking technology. The researcher seeks to improve his personal knowledge, as well as the knowledge base of the role of vehicle tracking technology and the importance thereof in the recovery of stolen motor vehicles
- To make recommendations, based on the findings of the study, to Tracker, the SAPS, the general public and insurance companies, on the importance of vehicle tracking technology in the recovery of stolen and motor vehicles .

## **1.6 DEMARCATION OF STUDY**

This study was limited to SAPS Police Emergency Services (PES) who performs duties at the SAPS: West Rand Flying Squad in Gauteng. The SAPS (PES) track and recover stolen and robbed motor vehicles by utilising Tracker vehicle tracking technology after such motor vehicles' tracking units are activated by the Tracker national emergency control centre. As a result, this study only focussed on the value of vehicle tracking technology in the recovery of stolen and robbed light motor vehicles, as experienced by these SAPS members. This demarcation prevented confusion in the interpretation and practical application of the research findings and recommendations.

## **1.7 RESEARCH QUESTION**

According to Denscombe (2002:31), research questions are exactly what is to be investigated and which specific things are to be observed, measured and questioned in order to shed light on the topic. This statement is agreed to by Mathews and Ross (2010:57) who are of the view that the research question should state the main purpose of the research and that it leads the researcher through the research process. Tracy (2013:15) agrees, and explains that research questions form the essence of the qualitative research project. According to Braun and Clarke (2013:44), the research question guides the design but it can also evolve and refine the study process. Mathews and Ross (2010:57) support this view by stating that research questions are central to the research project and that the research question/s will provide focus for the research. Tracy (2013:17) cautions that the number of research questions should be limited to one or two questions.

The researcher therefore focussed on the following research question in order to guide the research study: What is the value of vehicle tracking technology in the recovery of stolen motor vehicles?

## **1.8 KEY THEORETICAL CONCEPTS**

Key theoretical concepts forms the essence of what the research report is about (Denscombe, 2002:292). Leedy and Ormrod (2005:119) explain that the purpose of defining key concepts is the prevention of any misunderstanding.

The key concepts central to this study are defined, below, so that both the researcher and the reader understands exactly what the specific concepts mean in the context of this study. The key concepts central to this study are as follows:

### **1.8.1 Vehicle Tracking**

Vehicle tracking refers to locating a specific motor vehicle or monitoring its movement. The focus is to detect and identify the motor vehicle being tracked (Ilyas & Mahgoub, 2005:89).

For the purpose of this study, ‘vehicle tracking’ means the application of vehicle tracking technology by SAPS: PES members, in Gauteng, by means of the three major vehicle tracking units, as mentioned in section 1.2 of this study, utilised by Tracker to monitor, track and recover stolen and robbed motor vehicles .

### **1.8.2 Theft**

According to Snyman (2014:475), “a person commits theft if he unlawfully and intentionally appropriates movable, corporeal property which belongs to, and is in the possession of another, or belongs to another, but is in the perpetrator’s own possession, or belongs to the perpetrator, but is in another’s possession and such other person has a right to possess it which legally prevails against the perpetrator’s own right of possession provided that the intention to appropriate the property includes an intention permanently to deprive the person entitled to the possession of such property.”

For the purpose of this study, ‘vehicle theft’ refers to the unlawful and intentional appropriating of a motor vehicle belonging to another person with the intention of permanently depriving such a person of the vehicle.

### **1.8.3 Robbery**

According to Milton (2010:642), “robbery consists of the theft of property by intentionally using violence or threats of violence to induce submission to its taking.”

For the purpose of this study, ‘vehicle robbery’ (also known as hijacking) refers to the unlawful and intentional taking of a vehicle through the use of violence or threats of violence to force the lawful owner or driver of such vehicle to comply with the taking of the vehicle.

## **1.9 VALUE OF THE RESEARCH**

According to De Vos, Strydom, Fouche and Delport (2011:107), research must be useful and add value to the planned target group. Good research demonstrates its relevance in terms of existing knowledge that contributes something to existing theories, the way it addresses practical problems and the timeliness thereof (Denscombe, 2002:43).

As a result, the outcomes of this study are to:

- Improve Tracker, other South African vehicle tracking companies and the short term insurance industries' knowledge and competence regarding the value of vehicle tracking technology and recovery of stolen motor vehicles ;
- Contribute to the limited existing body of knowledge on the topic, as an academic source for students and prospective researchers; and
- Contribute to the broader South African community, insurance companies, vehicle tracking companies and the SAPS on the impact of vehicle theft and the non-recovery of stolen and robbed motor vehicles on the South African economy.

## **1.10 RESEARCH DESIGN AND APPROACH**

Research design is the recipe that guides the investigator or researcher in the process of collecting, analysing and interpreting data (Creswell, 1998:15). This statement is supported by Liamputtong (2013: 271) who states that the research design is a coherent and organised planning and directing of a piece of research. Flick (2014:112) also mentions that research design deals with the issue of how to plan a study. According to Flick (2014:146), an issue is discovered or defined, it requires empirical research and, sometimes, a personal experience leads a researcher to decide on a topic to study.

The researcher conducted empirical research, since this study involved going out into the field and ascertaining the personal experiences and knowledge of the participants, as explained by Mouton (2001:149), i.e. PES members attached to the SAPS: West Rand Flying Squad, Gauteng. According to Maxfield and Babbie (2005:4), experience and observation are key providers of knowledge in empirical research. Maxfield and Babbie (2005:6), furthermore, describe empirical research as the production of knowledge based on experience or observation. Empirical research allowed the researcher to obtain first-hand information

from the participants and it allowed the researcher to probe the responses from the participants in greater detail during interviews.

The researcher gathered data by means of semi-structured interviews and conducted a comprehensive literature study, which constitute a qualitative research approach. A qualitative approach entails conducting interviews with individuals or focus groups (Leedy & Ormrod, 2005:95). According to Braun and Clarke (2013:78), the semi-structured interview is the dominant form for qualitative research. In this approach, the researcher prepares an interview schedule before starting the planned interview; the contents thereof, the order in which the questions are asked or the precise wording of the questions, do not need to be rigidly adhered to.

In addition to a review of the relevant body of literature, semi-structured interviews were conducted with members attached to the SAPS: West Rand Flying Squad in Gauteng. The researcher followed a qualitative research approach since, according to Creswell (1998:15), qualitative researchers study participants in their natural environment in that they go to the field, gather information/data, analyse the information/data, arrive at certain findings and make recommendations. Based on the work of the abovementioned authors, the researcher considered the qualitative approach to be the best approach for this study.

### **1.11 POPULATION AND SAMPLING PROCEDURES**

Dahlberg and McCraig (2010:173) indicate that population relates to who the researcher plans to question about the research problem. This could include people, groups and companies in relation to which the researcher wants to make conclusions about the research problem. According to Welman et al. (2005:52-53), a population is the item that is being researched, namely, units of analysis such as persons, groups, entities, human products and occurrences, or the situations that they are exposed to. Kalof et al. (2008:140-141) propagate that a population comprises units of analysis, for example, people, objects and countries, that have shared common characteristics, and about which the researcher is interested. Dahlberg and McCraig (2010:173), Welman et al. (2005:52) and Kalof et al. (2008:140-141) agree that the population is the object of the research which can take the shape of people, groups and entities, but is not limited to these.

Dahlberg and McCraig (2010:173) indicate that a population can be selected, depending on the research problem, based on factors that are geographic (location), factors that are demographic (e.g. types of people in a particular community or organisation), factors based on usage (people who use a particular service) and factors based on awareness (people who are aware of a service). Kalof et al. (2008:141) provide examples of populations as residents of a country, patients in a particular hospital in a particular year, science textbooks in a particular country, and so forth.

The ideal population for this research would have been all SAPS members attached to the PES who utilise Tracker vehicle tracking technology for the tracking and recovering of stolen motor vehicles. It would, however, be impractical to consult with this wide population; therefore, the researcher will make use of a target population. The target population for this study will include SAPS members attached to PES in Gauteng. These members are exposed to the application of Tracker vehicle tracking technology to track and recover stolen and robbed motor vehicles, on a daily basis. The sample of this study purposefully included members attached to the PES, Gauteng, who perform duties at the SAPS: West Rand Flying Squad. As mentioned in 1.2 above, the SAPS motor vehicles utilised by these members are equipped with Tracker vehicle tracking technology and are utilised operationally by the SAPS to track and recover stolen and robbed motor vehicles.

According to the Policy Document 3/2006 (South Africa, 2006), the flying squad 'includes all activities and type of patrols with motor vehicles within the SAPS Emergency Response Services command and control structure'. The flying squad is described as a crime deterrent, 'as well as [serving] as a force multiplier to all the police stations in its service area during priority/serious and violent crimes in progress, such as vehicle robbery, that requires an immediate response. The flying squad could also provide back-up for all the police stations in its service area if the police station might need assistance during life-threatening circumstances'.

The researcher intends to make use of a non-probability sample, mostly due to the fact that less time and financial expenses are needed to do such research. The researcher agrees with Welman et al. (2005:68), as well as Mathews and Ross (2010:165), that the advantage of non-probability sampling is that it is less problematic and more cost-effective to use. For the purpose of this research, purposive sampling will be used, since the researcher relies on his experience to obtain units of analyses. According to Maxfield and Babbie (2008:235), the

purposive sampling method is based on one's own knowledge of the population, its elements and the nature of the research aims. Mathews and Ross (2010:167) explain that, in purposive sampling, there is no attempt to create a sample that is statistically representative of a population. Rather, people are chosen with a purpose in order to enable the researcher to explore the research question because they are information rich. Purposive sampling is exactly what the name suggests: members of a sample are chosen with a purpose (Ritchie, Lewis, Nichols & Ormston, 2014:113).

As a result, purposive sampling was applied to SAPS members attached to the PES, Gauteng, who perform duties at the SAPS: West Rand flying squad. Vehicle tracking by means of technology is dynamic and the application thereof requires highly skilled and trained members. These SAPS members are part of a limited number of members who received formal training in the utilisation of Tracker vehicle tracking technology and who utilise this technology on a daily basis in order to track and recover stolen and robbed motor vehicles. As a result, first-hand information on the value of vehicle tracking technology in the tracking and recovery of stolen and robbed motor vehicles was obtained. The chosen sample was interviewed until data saturation had been reached.

## **1.12 DATA COLLECTION**

The researcher gathered primary data by means of semi-structured interviews. According to Maxfield and Babbie (2005:209), with field research, much of the value of the research depends on how the data was collected. Similarly, Leedy and Ormrod (2005:143) mention that qualitative researchers often use multiple forms of data gathering techniques, such as observations, interviews and anything else that can help them answer their research questions, in a single study.

### **1.12.1 Interviews**

According to Noaks and Wincup (2004:123), when researchers want to conduct interviews, they need to plan in advance to identify, address and analyse the key concepts. Creswell (2009:181) further adds that the intentions of these interviews are to obtain the participants' views and opinions. Kumar (2011:144) defines interviewing as a commonly used method to collect information from people. It is further stated, by Kumar (2011:144), that the researcher

has the freedom to decide upon the format and content of the questioning when conducting an interview.

The researcher used the semi-structured interview method to interview participants, as it allowed participants to speak from their personal experiences and knowledge concerning the tracking and recovery of stolen motor vehicles by means of technology. The researcher formulated an interview guide, derived from the problem statement and research question, and used this to obtain data from the SAPS: West Rand Flying Squad members. As a result, a first-hand comprehensive perspective was obtained in order to gain a holistic and improved understanding of the recovery of stolen and robbed motor vehicles through the use of vehicle tracking technology.

According to Welman et al. (2005:166), in a semi-structured interview, the researcher has a list of themes and questions to be addressed, although these may vary from one interview to the next. Instead of an interview schedule, interview guides are used in semi-structured interviews. In agreement with this statement, Braun and Clarke (2013:78) state that, in a semi-structured interview, the researcher prepares a list of questions before commencing the interview. The contents of the list or the order in which the questions are asked, does not need to be rigidly adhered to, neither does the precise wording of the questions need to be used. The views and opinions gathered from participants were recorded electronically, for transcription purposes, in order to facilitate the data analysis process.

### **1.13 DATA ANALYSIS**

According to Rubin and Rubin (1995:226), the beginning of the process of data analysis is to examine the data you have collected, pull out the concepts and themes that describe the world of the interviewees and decide which areas should be examined in more detail. The researcher analysed and compared the data that was received from the interviews by means of the data analysis spiral. The data was organised and arranged in a manageable form in order to understand and interpret it. The data was further grouped according to categories and themes.

According to Maxfield and Babbie (2005:107), one manipulates the collected data for the purpose of drawing conclusions that reflect on the interests, ideas, and theories that initiated

the inquiry. The researcher, however, arranged the data according to the spiral method, in an organised manner, and captured it onto a computer for ease of reading and copying where necessary. Leedy and Ormrod (2001:161) describe the data analysis spiral as equally applicable to a wide variety of qualitative studies. The researcher scrutinised the data, repeatedly, then analysed and sorted it so that answers and comments that belong together were placed and stored together for further reference. This information was then integrated and summarised.

## **1.14 TRUSTWORTHINESS IN QUALITATIVE RESEARCH**

To establish the “trustworthiness” of a qualitative study, Lincoln and Guba (in Creswell, 2013:246) use unique terms, such as credibility, authenticity, transferability, dependability, and confirmability, as “the naturalist’s equivalents” for internal validation, external validation, reliability, and objectivity.

### **1.14.1 Methods taken to ensure validity**

- **Credibility**

According to Botes (2003:180), ‘credibility’ in qualitative research is the concept equivalent to internal ‘validity’ in quantitative research. Dahlberg and McCraig (2010:34-35) define validity as the correctness or credibility of an account, explanation or interpretation that the researcher reaches, and that sound sampling techniques contribute greatly to validity. Dahlberg and McCraig (2010:34-35) submit that the research results must be testable, thus allowing others to reach the same results using the same methods on the same research participants.

To ensure credibility, the researcher ensured that the interviews were conducted with SAPS members attached to the PES: Flying Squad West Rand, Gauteng, all of whom are continuously involved in the tracking and recovery of stolen motor vehicles . All participants were required to answer similar questions based on their knowledge and experience. The interview schedule was piloted among PES members who did not form part of the study. The participants have extensive knowledge of and experience in the tracking and recovery of stolen motor vehicles.

The information from various literature sources was compared, and was compared to the data secured from the interviews. Complete answers were secured from all interviewees for all questions posed, by means of the electronic recording and transcribing of such interviews. According to Trochim and Donnelly (as cited in Kumar, 2011:185), credibility involves establishing that the results of qualitative research are credible or believable from the perspective of the participant in the research. It is believed that the participants in this study were the most suitable judges to determine whether the research findings accurately reflected their opinions and feelings. Therefore, the findings of this study were taken back to the respondents for validation.

- **Transferability**

Transferability refers to the degree to which the results of qualitative research can be generalised or transferred to other contexts or settings (Trochim and Donnelly, in Kumar, 2011: 185)). According to Sandelowski (in Liamputtong, 2013:26), transferability conveys that the theoretical knowledge secured from qualitative research can be applied to other similar individuals, groups, or situations. This is viewed as an alternative to external validity or generalisability.

To ensure transferability, the researcher provided detailed descriptions of the participants' responses to interview questions in order to communicate the research findings in the form of verbatim quotations. These detailed narratives of participants transferred readers to the setting and contributed to an element of shared experiences. Such in-depth narratives allowed readers to make decisions regarding the transferability of the findings.

#### **1.14.2 Methods to ensure reliability**

- **Dependability**

Botes (2003:183) defines the 'dependability' as a concept used in relation to reliability in qualitative research. Jones (1996:19) is of the opinion that one's observations are reliable if one can duplicate or repeat them. Simply put, given similar circumstances, other people must be able to verify one's claims. Bouma and Ling (2004:84) indicate that recorded or published materials allow other people to review the exact material in order to test reliability. To ensure reliability, the researcher:

- (a) Kept recordings of all the interviews in both digital and written format and kept a detailed list of references;
- (b) Kept and documented full records and material evidencing the following:
  - How and what data was collected;
  - How interviews were conducted, using the same questions, consistently applied to each interviewee, enabling any other person to conduct interviews with the interviewee at any other time and reach the same results; and
  - How data was analysed, and reliance was placed only on the data that was gathered during the research, not subjective views.
- **Confirmability**

Confirmability refers to the degree to which the results could be confirmed or corroborated by others (Trochim and Donnelley, in Kumar, 2011:185). Kumar (2011:185) cautions that confirmability is only possible if both researchers follow the process in an identical manner, for the results to be compared. Liamputtong (2013:26) suggests that researchers should keep a detailed record of all the literature consulted in order to prove that the findings and interpretation thereof are clearly linked to the data.

To warrant confirmability, in this study, the researcher kept a thorough record of the research process followed to determine whether the interpretation of the findings, as well as the recommendations and conclusions made, can be drawn to their sources and if they are supported by the analysis. The researcher also protected the data that was electronically retrieved during the interviews. Records of the transcribed interviews were stored for review by other researchers, should they wish to validate or corroborate the results of the study.

## **1.15 ETHICAL CONSIDERATIONS**

Ethics are the moral principles that guide activities from the initiation of a research project to its completion, including the publishing of the research report; ethics must be incorporated into all aspects of the research process (Dahlberg & McCraig, 2010:41-42). With regard to the ethical considerations advocated by Dahlberg and McCraig (2010:43-45), and the ethical guidelines relevant to this study, the researcher:

- Ensured voluntary participation and that no-one felt obliged to participate. Participants could withdraw at any time without any explanation or penalty for withdrawing;
- Advised participants on the duration of the research study;
- Informed participants of the potential risks (if any) they may have been exposed to due to their participation;
- Made it clear to participants how the research results will be used and that their individual responses will not be disseminated, and that they will be afforded anonymity;
- Informed participants that no compensation will be paid to them; and
- Applied and maintained professional integrity standards and quality, gave credit to all data sources consulted and minimised the risk of error, by being honest and professional. The researcher did not fabricate or falsify data, did not plagiarise any information source, and undertook no deception of any kind, did not contravene any law, nor facilitate any other unethical research practices.

According to the *Policy on Research Ethics of the University of South Africa*, (University of South Africa, 2007:7), researchers should respect and protect the dignity, privacy and confidentiality of participants. The researcher adhered to the University of South Africa's code of conduct for researchers.

The following ethical guidelines were adhered to during this study:

#### **1.15.1 Protection from harm**

The names of participants were not revealed so as to protect them from any unnecessary physical or psychological harm, thus, they were referred to as participants. The researcher also ensured that the necessary permission was obtained prior to conducting any interviews, and that the interviewees were provided with sufficient information on the research being conducted.

#### **1.15.2 Informed consent**

Informed consent implies that subjects are made adequately aware of the type of information you want from them (Kumar, 2011:244). The researcher informed the participants in advance of the aim, purpose and nature of the research which allowed them to make an informed

decision about whether or not to participate. Written consent was obtained from each participant from the SAPS members attached to PES: West Rand Flying Squad, Gauteng. The researcher obtained written permission from the SAPS to conduct the research and obtained the agreement of every participant that they will be interviewed at free will and that they could withdraw from the process at any time without any explanation. Kumar (2011:244) mentions that consent should be voluntary with no pressure of any kind.

The SAPS members, who were selected as the sample of participants, voluntarily agreed to be interviewed. The interviews were conducted at their convenience and at suitable venues chosen by the researcher. The researcher reported the findings of this study honestly, based on the interviewees' responses.

### **1.15.3 Acknowledgement of sources**

All sources cited were duly acknowledged to ensure that no plagiarism is committed. Appropriate references of all sources cited in this research were made and the researcher acknowledged the literature by including a comprehensive list of references.

### **1.15.4 Confidentiality**

According to Kumar (2011:246), it is unethical to share information about a respondent with others for purposes other than research. The information retrieved from participants was used solely for the purpose of this study. Confidentiality was guaranteed since the names of the participants remained anonymous. Interviews were conducted privately and individually.

### **1.15.5 Right to privacy**

The participants' right to privacy was respected and maintained. According to Leedy and Ormrod (2001:128), participants should not participate in research which could cause them embarrassment.

## **1.16 SUMMARY**

This chapter provided an overview of the study. The rationale for the study and the relevance of the study were also presented herein. The main focus of the study was highlighted through discussion of the goals and objectives of the research, and the introduction of key theoretical

definitions provided further clarification. In addition, the geographical demarcation and scope of this study was presented in order to clarify where the study was conducted as well as the extent thereof.

This chapter presented theoretical information regarding the research methodology and pointed out the exact steps that were followed to address the research problem and to reach the goal of this study, namely, to explore the value of vehicle tracking technology in the recovery of stolen motor vehicles. This chapter also included discussion of the nature of the research approach, design, and methods of data collection, as well as a description of the measuring instruments and data analysis procedures employed in the study.

Semi-structured interviews and a literature study were conducted by the researcher. This research is of a qualitative nature, thus, methods to ensure trustworthiness in qualitative research were explained. Finally, the ethical considerations followed in this study were also described in this chapter.

Chapter 2 provides a broad legislative overview pertaining to vehicle theft within South Africa.

## **CHAPTER 2            STATUTORY OVERVIEW GOVERNING VEHICLE THEFT IN SOUTH AFRICA**

### **2.1        INTRODUCTION**

This chapter presents an overview of legislation and policy governing motor vehicle theft and motor vehicle robbery in South Africa. The applicable legislation, policies and directives provide the foundation of this chapter. Directives governing the utilisation of motor vehicle tracking technology in South Africa further augment the legislative overview. The focus of this statutory overview has been limited to South African criminal and statutory law, with specific reference to motor vehicle related crime. It is important to highlight the significance of each Act, policy and directive which addresses motor vehicle related crimes as well as the utilisation of vehicle tracking technology. The significance of this governing framework is, firstly, to identify the applicable legislation that governs motor vehicle related crime, and, secondly, to outline the implications of committing such crimes as prescribed by South African legislation.

### **2.2        BROAD LEGISLATIVE AND POLICY FRAMEWORK SPECIFICALLY RELATED TO VEHICLE THEFT**

The following discussion will focus primarily on legislation and policy directives applicable to theft, which are then contextualised specifically to the theft of motor vehicles . As opposed to motor vehicle robbery, also commonly referred to as hijacking (see 2.3), no form of physical violence against a person is involved in the commissioning of motor vehicle theft (see 1.8.2). In addition to the identified legislation, alternative Acts within the South African legal framework, which could be enforced when a vehicle has been stolen, a suspect has been arrested and subsequently charged, are also identified and presented herein.

The establishment of the South African Constitution (South Africa, 1996(a)) as contemplated in Act 108 of 1996 is discussed, below, as relevant to the role players in the criminal justice process, with regard to vehicle crime. The Constitution establishes the need for private security companies, such as Tracker, to assist in crime fighting within the parameters of the law as well as in forming partnerships to fight and combat crime.

## **2.2.1 THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA ACT 108 OF 1996**

The Constitution of the Republic of South Africa, Act 108 of 1996 (South Africa, 1996(a)), which was signed into law on 10 December 1996, is considered and accepted to be the supreme law of South Africa.

Section 205 of the Constitution refers to the South African Police Service, as follows.

- (1) The national police service must be structured to function in the national, provincial and, where appropriate, local spheres of government.
- (2) National legislation must establish the powers and functions of the police service and must enable the police service to discharge its responsibilities effectively, taking into account the requirements of the provinces.
- (3) The objectives of the police service 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 178 of the Constitution refers to the National Prosecuting Authority, as follows.

- 1) There is a single national prosecuting authority in the
  - (a) National Director of Public Prosecutions, who is the head of the prosecuting authority, and is appointed by the President, as head of the national executive, and;
- (2) The prosecuting authority has the power to institute criminal proceedings on behalf of the state, and to carry out any necessary functions incidental to instituting criminal proceedings.

Section 199 of the Constitution refers to the establishment, structuring and conduct of security services, as follows.

- (3) Other than the security services established in terms of the Constitution, armed organisations or services may be established only in terms of national legislation.
- (4) The security services must be structured and regulated by national legislation.

The legal prescribed definition of theft will follow for discussion, as contemplated in Act 50 of 1956.

### **2.2.2 THE GENERAL LAW AMENDMENT ACT 50 OF 1956**

The General Law Amendment Act 50 of 1956 (South Africa, 1956) clearly defines theft as an unlawful appropriation of another person's property. This Act clearly stipulates that:

(1) Any person who, without a *bona fide* claim of right and without the consent of the owner or the person having the control thereof, removes any property from the control of the owner or such person with intent to use it for his own purposes without the consent of the owner or any other person competent to give such consent, whether or not he intends throughout to return the property to the owner or person from whose control he removes it, shall, unless it is proved that such person, at the time of the removal, had reasonable grounds for believing that the owner or such other person would have consented to such use if he had known about it, be guilty of an offence and the court convicting him may impose upon him any penalty which may lawfully be imposed for theft;

(2) Any person charged with theft may be found guilty of a contravention of subsection (1) if such be the facts proved.

It is thus clear that should a person take another's motor vehicle without the consent of the owner such person may be charged with theft in accordance with Section (1) of the General Law Amendment Act 50 of 1956. The researcher also notes that, in South African law, there is no specific provision made for the theft of a motor vehicle *per se* as is made for the theft of stock, as an example, where a specific statutory law was promulgated. As a result, a suspect apprehended for motor vehicle theft will subsequently be charged for theft, but the stolen property, namely a motor vehicle, will be mentioned in the charge sheet that will be read in court by a prosecutor during the formal judicial proceedings.

The general elements that need to be present to constitute theft, including motor vehicle theft, follow for discussion.

### 2.2.2.1 General elements to be present to constitute the crime of theft

An offence or crime can best be described as the “unlawful and blameworthy conduct which is defined by law as a crime and for which punishment is prescribed” (Joubert, 2013:46). The following general elements of a crime, according to Joubert (2013:46), can be identified as:

- Legality
- Conduct
- Unlawfulness, and
- Culpability

- (1) Legality: “The phrase ‘defined by the law as a crime’ suggests that a person’s conduct is regarded as being of a criminal nature and defined as such by either the common law or by statutory law. The subsequent requirement, ‘for which punishment is prescribed’, indicates that a prescribed punishment or penalty is attached to the specific conduct, rendering it an offence” (Joubert, 2013:47).
- (2) Conduct or act: “An act is normally the first requirement for criminal liability; in other words, there must be conduct. Conduct is defined as an act of some sorts” (Snyman, 2014:51). “The requirement of an act or conduct incorporates the standard that a thought or even decisions are not punishable. Thought must be converted into action before there will be criminal accountability, furthermore, the persons actions must be voluntary” (Snyman, 2014:30).
- (3) Unlawfulness: “The term “unlawful” specifies that the specific conduct is unjustified. There must, therefore, be no legal justification for the particular act or conduct by a person” (Joubert, 2013:47). Snyman (2014:97) is of the opinion that “unlawfulness” can only be due to a “specific intended human action”.
- (4) Culpability: ““Blameworthy’ implies first of all that the accused must have been criminally accountable while performing the unlawful act. It also indicates that the accused has complied with the culpability requirement.” (e.g. a planned or intended theft or robbery of a motor vehicle) (Joubert, 2013:47)

Joubert (2013:46) stresses that it is of utmost importance for the state [prosecutor] to concurrently prove beyond a reasonable doubt all the elements of the crime, as mentioned above, against the accused while the crime was committed, to ensure a conviction in court. Should the state not be able to prove the elements, as discussed, the accused will be found not guilty by the court.

This notion is supported by Snyman (2014:36), who stresses that an accused will not be found guilty of an offence if:

- the crime is not recognised in law as such,
- before the conduct took place, and
- without the court having to stretch the definition of the offence.

Most statutory offences are promulgated with a specific penalty section. A custodial sentence will normally be imposed by the court for crimes such as theft of a motor vehicle only if specifically provided for (Joubert, Bekker, Geldenhuys, Swanepoel, Terblanche & van der Merwe, 2007:280). Snyman (2014:550) explains that, according to the provisions of the Adjustment of Fines Act 101 of 1991 (South Africa, 1991), the maximum fine that may be imposed is R120 000 x 3 = R360 000 in the case of a magistrates court that is not a regional court, and in the case of a Regional Court R600 000 x 3 = R 1.8 million. Both a fine and imprisonment may also be imposed.

Joubert (2013:38) explains that a district court may impose a prison sentence of up to 3 years and that a regional court may impose a prison sentence of up to 15 years. It is noted, by the researcher, that the court may use its own discretion when imposing a sentence on a person found guilty of motor vehicle theft. From the researcher's experience, the courts are inclined to lean towards a prison sentence that is between 3 and 7 years when a person is convicted of vehicle theft.

Section 82 of the Third Law Amendment Act 129 of 1993 (South Africa, 1993(b)) follows for discussion, to illustrate the legal prescriptions should a person be found in possession of an implement suspected to be used or intended to be used to unlawfully gain access to a motor vehicle.

### **2.2.3 THE THIRD LAW AMENDMENT ACT 129 OF 1993**

According to Snyman (2014:550), Section 82 of the Third Law Amendment Act 129 of 1993 (South Africa, 1993(b)) provides that any person who possesses any “instrument or object in respect of which there is a reasonable suspicion that it was used or is intended to be used to commit house breaking, or to break open a motor vehicle or to gain unlawful entry into a motor vehicle, and who is unable to give a satisfactory account of such possession, is guilty of an offence and liable, on conviction, to a fine, or to imprisonment for a period not exceeding three years”.

A person using electronic devices or “signal jammers” to block a vehicle tracking unit signal, in order to ensure the non-recovery of the vehicle, will also be charged according to this act if such electronic equipment is found in the possession of the accused. For further detail, in this regard, see the Electronic Communications Act as discussed in 2.3.7.

Snyman (2014:550) explains that, as stated in 2.7.1, according to the provisions of the Adjustment of Fines Act 101 of 1991(South Africa, 1991) the maximum fine that may be imposed is  $R120\ 000 \times 3 = R360\ 000$  in the case of a Magistrate’s Court that is not a Regional Court, and in the case of a Regional Court it may be  $R600\ 000 \times 3 = R\ 1.8$  million. Joubert (2013:38) explains that a District Court may impose a prison sentence of up to 3 years imprisonment and a Regional Court may impose a prison sentence of up to 15 years imprisonment.

From the requirements of this legislation, it is clear that provisions are made to criminally charge a person for breaking open a motor vehicle with equipment, especially if the intention is to steal motor vehicles , as it is also clear that the intention of the suspect after breaking open the vehicle is to take control over the vehicle and permanently deprive the lawful owner thereof.

The researcher is of the opinion that, before a vehicle is actually stolen; the vehicle has to be broken into in order for the criminal or thief to gain access to it. Further, control must be taken of:

- The steering mechanism
- The clutch pedal, brake pedal and accelerator
- The ignition

- The gear lever and gear shift selector.

In order for this to happen, the vehicle needs to be broken into using some form of implement. From the researcher's experience, the following car breaking implements are commonly used to gain access to a stationary motor vehicle, and to start the engine:

- Flat screw driver
- T-star (Allen key that is sharpened on the end to create a wedge to break open door locks and ignitions)
- Hammer
- Fuses
- Spanner (normally a size 12 or 13)
- Electric wire
- Shifting spanner
- Electronic over riding equipment such as smart keys and signal blocking devices.

In the researcher's experience, if a stolen motor vehicle is recovered and suspects are found to have vehicle breaking implements in their possession, these suspects are not charged with this specific act as a secondary charge. In fact, charging a suspect in accordance with Section 82 of the Third Law Amendment Act 129 of 1993(South Africa, 1993(b)) will strengthen the charge of theft and ultimately complete the criminal justice process.

Section 36 of the General Law Amendment Act 62 of 1955 (South Africa, 1955) follows for discussion. This Act makes provision for goods, including motor vehicles, found in the possession of a person who is unable to give satisfactory account of such possession and a reasonable suspicion exists that goods have been stolen shall be guilty of an offence.

#### **2.2.4 SECTION 36 OF THE GENERAL LAW AMENDMENT ACT 62 OF 1955**

Motor vehicle theft normally occurs when the owner of such a motor vehicle is not present, for example, while the owner is at work or asleep, and he/she therefore only realizes at a later stage that his/her vehicle was stolen. When such a vehicle is reported to be stolen and subsequently recovered and a suspect is found in possession of the motor vehicle, it is difficult to prove that the motor vehicle was stolen by the same person in whose possession the motor vehicle was found.

Snyman (2014:515) is of the opinion that if a person is found in possession of a stolen motor vehicle it is a challenging task to prove to a court of law that indeed the arrested person is the exact same person that committed the actual offence, namely, theft of the motor vehicle. The state prosecutor will not always be in a position to prove beyond a reasonable doubt the actual theft; therefore Section 36 of the General Law Amendment Act 62 of 1955 (South Africa, 1955) applies.

Snyman (2014:515) explains the definition of Section 36 of Act 62 of 1955, as follows:

“Any person who is found in possession of any goods, other than stock or produce as defined in Section 13 of the Stock Theft Act 26 of 1923 (South Africa, 1923) in regards to which there is reasonable suspicion they have been stolen and is unable to give a satisfactory account of such possession, shall be guilty of an offence and liable on conviction to the penalties which may be imposed on a conviction of theft.”

In the matter *Doma v S (2012/A447)[2013]ZAGPJHC 116*, in the South Gauteng High Court, the learned Judge Sutherland, in his judgement, is quoted as saying that Section 36 of this Act is a “policeman’s crime”. This is “because it is the failure of a perpetrator to account for goods that are suspected to be stolen when found in his/her possession by a police officer, thus only a police officer may lawfully question and investigate a person found in possession of suspected stolen property”.

The elements that should be present if there is reasonable suspicion that goods (e.g. motor vehicles) have been stolen, and a satisfactory account of such possession cannot be given, will follow for discussion.

#### **2.2.4.1 Elements to be presented to constitute theft on reasonable suspicion in the absence of satisfactory explanation of possession**

The elements that should be present if there is reasonable suspicion that goods (e.g. motor vehicles) have been stolen, and a satisfactory account of such possession cannot be given, are:

- the goods (e.g. a motor vehicle )
- a person must be found in possession (of the stolen motor vehicle)
- a reasonable suspicion (that the motor vehicle was stolen)

- the person found in possession was unable to supply a satisfactory explanation of the possession (i.e. why is the stolen motor vehicle in the suspect's possession?) (Snyman, 2014:515)

In the case of *S v Doma (2012/A447)[2013]ZAGPJHC 116*, in the South Gauteng High Court, the learned Judge Sutherland (2013) clearly explains the elements of the crime as:

- to be found in possession of goods [a motor vehicle]
- the existence of a reasonable suspicion that the goods [a motor vehicle] are stolen
- the absence of a reasonable explanation by the accused.

Section 37 of the General Law Amendment Act 62 of 1955 is discussed in the following section. This Act governs the receiving of stolen property (e.g. stolen motor vehicle), with the knowledge that it has been stolen.

### **2.2.5 SECTION 37 OF THE GENERAL LAW AMENDMENT ACT 62 OF 1955**

Section 37 of the General Law Amendment Act 62 of 1955 (South Africa, 1955) provides the following:

- (a) any person who in any manner, other than a public sale, acquires or receives into his or her possession, from any other person stolen goods, other than stock or produce as defined in section 13 of the Stock Theft Act 26 of 1923 (South Africa, 1923), without having reasonable cause for believing at the time of such acquisition or receipt that such goods are the property of the person from whom he/she receives them or that such person has been duly authorised by the owner thereof to deal with or to dispose of them, shall be guilty of an offence and liable on conviction to the penalties which may be imposed on a conviction of receiving stolen property knowing it to have been stolen except insofar as the imposition of any such penalty may be compulsory.
- (b) in the absence of evidence to the contrary which raises a reasonable doubt, proof of such possession shall be sufficient evidence of the absence of reasonable cause.

In the case of *S v Doma (2012/A447)[2013]ZAGPJHC 116*, in the Gauteng High Court, the honourable court explains that 'possession' required for guilt under Section 37 of this Act includes mere detention on behalf of another. In *S v Moller 1990 (3) SA 876 (AD)*, and *Rex v*

*Von Elling* 1945 AD 234 at 250, a person who drove a vehicle knowing full well that the car has been stolen being held to have had the necessary possession to be guilty of being an accessory to the theft.

Joubert (2013:155) explains that in order for the prosecution to reach a conviction in criminal court the following must be proved according to Section 37 of this Act

- The goods[ for e.g. a motor vehicle] was attained other than at a public sale
- The accused received the goods [for e.g. a motor vehicle] into his/her possession
- The goods [for e.g. a motor vehicle] was stolen.

It is thus very clear that mere detention without a suitable explanation is adequate to charge a person with receiving stolen property (motor vehicle), under the provisions of section 37 of the General Law Amendment Act 62 of 1955 (South Africa, 1955). From the researcher's experience, it is frequently found that suspects who are found in possession of a stolen motor vehicle, after being tracked by means of vehicle tracking technology, explain that "somebody" brought the motor vehicle to them requesting that the motor vehicle be parked for a while. Notwithstanding the fact that the motor vehicle's locks were damaged and the motor vehicle's interior was stripped, the owner of the property allows the motor vehicle to be parked.

Section 264 and Section 265 of the Criminal Procedure Act 51 of 1977 (South Africa, 1977) deals with competent verdicts regarding theft and the receipt of stolen property knowing it to have been stolen. These matters will follow for discussion.

#### **2.2.6 THE CRIMINAL PROCEDURE ACT 51 OF 1977**

Section 264 of the Criminal Procedure Act 51 of 1977 (South Africa, 1977) specifically deals with competent verdicts, with regard to matters such as motor vehicle theft:

- (1) If the evidence on a charge of theft does not prove the offence of theft, but-
  - (a) the offence of receiving stolen property knowing it to have been stolen;
  - (b) an offence under section 36 or 37 of the General Law Amendment Act,

1955 (Act 62 of 1955); or

(c) an offence under section 1 of the General Law Amendment Act, 1956 (Act 50 of 1956),

The accused may be found guilty of the offence so proved.

(2) If a charge of theft alleges that the property referred to therein was stolen on one occasion and the evidence proves that the property was stolen on different occasions, the accused may be convicted of the theft of such property as if it had been stolen on that one occasion.

From the provisions as per section 264 of the Criminal Procedure Act 51 of 1977 (South Africa, 1977) the researcher is of the opinion that the major factor to consider in cases pertaining to Section 36 of the General Law Amendment Act 62 of 1955 (South Africa, 1955) is that of a non-satisfactory answer by the person in whose possession the goods (e.g. motor vehicle) were found.

Section 265 of the Criminal Procedures Act 51 of 1977 (South Africa, 1977) deals with receiving stolen property (e.g. a motor vehicle) knowing it to have been stolen:

If the evidence on a charge of receiving stolen property knowing it to have been stolen does not prove that offence, but-

(a) the offence of theft; or

(b) an offence under section 37 of the General Law Amendment Act, 1955 (Act 62 of 1955),

the accused may be found guilty of the offence so proved.

The following discussion deals with motor vehicle robbery and will address the relevant legislation pertaining to this crime, also commonly referred to as “robbery”, and the use of violence or the threat thereof during the commissioning of this crime. In addition, this section also highlights other relevant legislation dealing with violence or threats of violence used to appropriate property, such as a motor vehicle, and the relevant legislation governing the use of firearms since vehicle robberies primarily involve the use of firearms. Moreover, legislation governing the responsibilities of the owner of a vehicle when such a vehicle has been stolen or robbed and subsequently recovered, legislation governing the operations of Tracker as well as the regulation on the use of electronic communications follow for discussion.

### **2.3 BROAD LEGISLATIVE AND POLICY FRAMEWORK SPECIFICALLY RELATED TO MOTOR VEHICLE ROBBERY**

From the researcher's experience, it has been noted that all robberies in which either violence was used, or there was a threat of the use of violence, the use of a firearm was the preferred method to commit these motor vehicle robberies. Consequently, there is always a correlation between robbery of motor vehicles and the use of firearms. Vehicle robbers will even "cock" the weapon they use during robberies to create more anxiety for the victims (Zinn, 2002:3). Due to the nature and seriousness of robbery, a system had to be put in place that regulates the punishment of such offenders. This punishment is based on first second and third time offenders. Subsequently, the Criminal Law Amendment Act 105 of 1997 (South Africa, 1997) came into effect and the reason for this Act was to provide for minimum sentences, in Section 51 of the Act, relating to certain crimes such as robbery with aggravating circumstances or the robbery of a motor vehicle.

#### **2.3.1 CRIMINAL LAW AMENDMENT ACT, 105 OF 1997**

According to section 51(2)(a) of the Criminal Law Amendment Act 105 of 1997 ( South Africa, 1997), if the court has convicted a person of an offence referred to in Part II of Schedule 2, the person is sentenced in the case of:

- (i) a first offender, to imprisonment for a period no less than 15 years
- (ii) a second offender, to imprisonment for a period of no less than 20 years
- (iii) a third or subsequent offender, to life imprisonment.

Part II of Schedule 2 of section 51 of the Criminal Law Amendment Act, 105 of 1997 explains that robbery:

- (a) is when there are aggravating circumstances; or
- (b) involves the taking of a motor vehicle.

#### **2.3.2 SECTION 260 OF THE CRIMINAL PROCEDURE ACT 51 OF 1977**

Joubert (2013:160) refers to Section 260 of the Criminal Procedures Act 51 of 1977 (South Africa, 1977) as a competent verdict to robbery. If the evidence on a charge of robbery or

attempted robbery does not prove the offence of robbery or, as the case may be, attempted robbery, but-

- (a) the offence of assault with intent to do grievous bodily harm;
- (b) the offence of common assault;
- (c) the offence of pointing a firearm, air-gun or air-pistol in contravention of any law;
- (d) the offence of theft;
- (e) the offence of receiving stolen property knowing it to have been stolen; or
- (f) an offence under section 36 or 37 of the General Law Amendment Act, 1955 (Act 62 of 1955), the accused may be found guilty of the offence so proved, or, where the offence of assault with intent to do grievous bodily harm or the offence of common assault and the offence of theft are proved, of both such offences.

The following discussion highlights the provisions of the Fire Arms Control Act 60 of 2000 (South Africa, 2000(b)). The relevance of the conditions of this Act pertaining to vehicle robbery is contextualised by an overview of the definition of a firearm, a brief discussion on the purpose of this Act, the penalty for possession of an illegal firearm and clarity on what constitutes the pointing of a firearm.

### **2.3.3 FIRE ARMS CONTROL ACT 60 of 2000**

In 2000, South Africa passed new legislation concerning firearms, titled the Fire Arms Control Act 60 of 2000 (South Africa, 2000(b)). This Act governs the ownership and use of firearms. From the researcher's experience, it has been noted that fire arms are primarily used to commit vehicle robberies. This notion is confirmed by Zinn (2002:73), who indicates that 97% of robbers are armed during vehicle robberies.

A firearm, according to Section 1 of the Fire Arms Control Act 60 of 2000 (South Africa 2000(b)) can be defined as a:

- (a) device manufactured or designed to propel a bullet or projectile through a barrel or cylinder by means of burning propellant, at a muzzle energy exceeding 8 joules (6 ft-lbs);
- (b) device manufactured or designed to discharge rim-fire, centre-fire or pin-fire ammunition;
- (c) device which is not at the time capable of discharging any bullet or projectile, but which can be readily altered to be a firearm within the meaning of paragraph (a) or (b);
- (d) device manufactured to discharge a bullet or any other projectile of .22 calibre or higher at a muzzle energy of more than 8 joules (6 ft-lbs), by means of compressed gas and not by means of burning propellant; or
- (e) barrel, frame or receiver of a device referred to in paragraphs (a), (b), (c) or (d),

The Fire Arms Control Act 60 of 2000 (South Africa, 2000(b)) also clearly defines the differences between a:

- Fully automatic firearm, which is capable of discharging more than one shot with a single depression of the trigger;
- Handgun, which is a pistol or revolver that can be held in and discharged with one hand; and a
- Imitation firearm, which is anything that has the appearance of a firearm but is not capable of operating as such and cannot by superficial examination be identified as an imitation.

### **2.3.3.1 The purpose of the Fire Arms Control Act 60 of 2000**

The purpose of the Fire Arms Control Act 60 of 2000 (South Africa, 2000(b)) is to,

- (a) enhance the constitutional rights to life and bodily integrity;
- (b) prevent the proliferation of illegally possessed firearms and, by providing for the removal of those firearms from society and by improving control over legally possessed firearms, to prevent crime involving the use of firearms;

- (c) enable the State to remove illegally possessed firearms from society, to control the supply, possession, safe storage, transfer and use of firearms and to detect and punish the negligent or criminal use of firearms;
- (d) establish a comprehensive and effective system of firearm control and management; and
- (e) ensure the efficient monitoring and enforcement of legislation pertaining to the control of firearms.

This Act also states, in Chapter 2 (section 3 and 4), that no person may possess a firearm unless he/she holds a licence, permit or authorisation issued in terms of this Act for that firearm. It is also illegal to be in possession of a fully automatic firearm.

### **2.3.3.2 Penalty for possession of an illegal firearm**

The Fire Arms Control Act 60 of 2000 (South Africa, 2000(b)) makes specific provision for a penalty clause, should a person be found to be in possession of a firearm:

- The illegal possession of a handgun holds a minimum sentence of 15 years imprisonment and;
- The illegal possession of a fully automatic firearm carries a minimum sentence of 25 years imprisonment.

### **2.3.3.3 Pointing of a firearm**

Section 120(6) of the Fire Arms Control Act 60 of 2000 (South Africa, 2000(b)) provides that it is a crime to point-

- (a) any firearm, an antique firearm or an airgun, whether or not it is loaded or capable of being discharged, at any other person, without good reason to do so; or
- (b) anything which is likely to lead a person to believe that it is a firearm, an antique firearm or an airgun at any other person, without good reason to do so.

Snyman (2014:459) defines the elements of the crime as:

- pointing
- a firearm or other specified article
- at any person

- unlawfully, and
- intentionally.

From the researcher's experience, vehicle robbers generally point a firearm at the driver of a vehicle when a vehicle is robbed. This pointing of the firearm will conform to the 'aggravating part' pertaining to the crime of aggravated robbery, as defined by the law (see 2.3.1). It is clear that the pointing of a firearm, or an object resembling a firearm, is a contravention of the Fire Arms Control Act 60 of 2000 (South Africa, 2000(b)).

The following section deals with the legal provisions, as governed by the National Road Traffic Act 93 of 1996 (South Africa, 1996(b)), which specifically reference stolen motor vehicles .

#### **2.3.4 NATIONAL ROAD TRAFFIC ACT 93 of 1996**

The National Road Traffic Act 93 of 1996 (South Africa, 1996(b)) makes certain provisions with regard to the theft of motor vehicles and what the owner's responsibilities are when a vehicle has been stolen, as well as the procedure to be followed after a vehicle has been recovered.

The National Road Traffic Act 93 of 1996 (South Africa, 1996(b)) defines a "motor vehicle" as any self-propelled vehicle and includes:

- (a) a trailer; and
- (b) a vehicle having pedals and an engine or an electric motor as an integral part thereof or attached thereto and which is designed or adapted to be propelled by means of such pedals, engine or motor, or both such pedals and engine or motor, but does not include
  - 
  - (i) any vehicle propelled by electrical power derived from storage batteries and which is controlled by a pedestrian; or
  - (ii) any vehicle with a mass not exceeding two hundred and thirty (230) kilograms and specially designed and constructed, and not merely adapted, for the use of any person suffering from some physical defect or disability and used solely by such person.

For purposes of this study, as per Chapter 1.6 of the study, the following vehicle body shape definitions are indicated by the National Association of Automobile Manufacturers of South Africa (NAAMSA, 2015).

<b>Body shape of vehicle</b>	<b>Auto Definition</b>
Sedan	A four door closed body with a boot; four or five seats
Coupe	A fixed roof closed body with two doors; two or four seats
Cabriolet	An open-top body with two or four doors; two or four seats
Estate	A four door closed body with a rear carrying area and a rear loading door; five seats
Hatch	A fixed roof closed body with three or five doors including a rear door; four or five seats
SUV (Sport utility vehicle )	A raised fix roof closed body with three or five doors including a rear door; five to seven seats; varying degrees of off-road capabilities
Crossovers	A closed or open top body with two to five doors; built on a passenger car-based platform incorporating a mixture of features from sports utility motor vehicles , estates, hatchbacks, sedans, etc.
Utility	A four door closed body with an extended rear section incorporating a carrying area; four to seven seats; 4x4
Pickup  (S-Cab, X-Cab, D-Cab)	A body with an enclosed cab and elongated uncovered load bay.  Single Cab with two doors; two or three seats  Extended cab with two doors; two or three seats, with extra space behind the front seats

	Double Cab with four doors; five seats
--	--

The National Road Traffic Act 93 of 1996 (South Africa, 1996(b)) defines the word “owner” as:

- (a) the person who has the right to the use and enjoyment of a vehicle in terms of the common law or a contractual agreement with the title holder of such a vehicle;
- (b) any person referred to in paragraph (a) for any period during which such person has failed to return that vehicle to the title holder in accordance with the contractual agreement referred to in paragraph (a); or
- (c) a motor dealer who is in possession of a vehicle for the purposes of sale.

The National Road Traffic Act 93 of 1996 (South Africa, 1996(b)) supplies a detailed description in sections 54(1) (a)(b)(c)(d) and 54(2)(a)(b) as to the theft of a motor vehicle and section 54 (6)(a)(b)(c) explains what an owner, as described, should do upon recovery of such vehicle.

#### **2.3.4.1 Procedure when a vehicle is stolen**

Section 54(1) (a)(b)(c)(d) of the National Road Traffic Act prescribes the following processes that the owner of a stolen/robbed vehicle should follow to report such loss:

54. (1) if a motor vehicle is stolen, the owner of such vehicle shall-
- (a) report the theft to the SAPS, within 24 hours after he or she has become aware of such theft;
  - (b) notify the title holder forthwith of the theft;
  - (c) within seven days after the date upon which he or she has become aware of the theft, if the motor vehicle concerned has not been recovered during such period, notify the appropriate registering authority of such theft; and

(d) submit the registration certificate of the motor vehicle concerned to the registering authority concerned, if such certificate is in such owner's possession.

54 (2) A change of title holder or owner of a motor vehicle reported stolen shall not be recorded in the register of motor vehicles unless such change results from-

- (a) an agreement of indemnity against the theft of such motor vehicle; or
- (b) an agreement between the owner and title holder of such a motor vehicle

54 (6) If the motor vehicle referred to in sub regulation (1) is recovered, the owner of such motor vehicle shall-

- (a) within 24 hours after such recovery, notify the South African Police Service thereof;
- (b) notify the title holder and the appropriate registering authority forthwith of such recovery; and
- (c) apply for the licensing of such motor vehicle.

The National Road Traffic Act 93 of 1996 (South Africa, 1996(b)) supplies a detailed description, in section 56(1) (2) (a) (b), on numbers that need to be affixed to a vehicle:

- (1) every motor vehicle shall have a chassis number of not more than 17 alpha-numerical characters which shall be cut, stamped, embossed on or permanently affixed to such motor vehicle and, if applicable an engine number of not more than 17 alpha-numerical characters which shall be cut, stamped, embossed on or permanently affixed to the engine of such motor vehicle.
- (2) The chassis number of every car, minibus, bus or goods vehicle registered for the first time on or after 1 January 1996, shall comply with the following standard specifications:
  - (a) South African Bureau of Standards (SABS)/International Standard of Operation (ISO) 3779 "Road motor vehicles - Vehicle identification number (VIN) - Content and structure".
  - (b) SABS/ISO 4030 "Road motor vehicles - Vehicle identification number (VIN) - Location and attachment".

The researcher is of the opinion that the VIN number is the single most crucial identification mark of the vehicle and without a VIN number it is extremely difficult, if not impossible, to

identify the true identity of a vehicle, unless there is some type of technology fitted to the vehicle, such as vehicle tracking technology. To emphasise the significance of vehicle tracking technology, a stolen or robbed vehicle that is fitted with vehicle tracking technology that has been tracked and recovered will allow for the positive identification of such vehicle and re-unite the vehicle and owner, even though the VIN tags might already have been removed.

According to Roebuck (2012(a):585), a vehicle identification number, referred to as a VIN number, is a distinctive serial number used by all vehicle producers/ manufactures to identify an individual motor vehicle. The VIN number can be seen as exactly the same as the identity number which is given to humans for identification purposes. Roebuck (2012(a):585) and Marsh (2014:142) are in agreement that, since 1981, it was expected that all newly built or manufactured motor vehicles would be issued with a VIN number. Subsequently, the issuing of a VIN number to all motor vehicles became a standard process across the motor vehicle producing and manufacturing industry. A standard 17 (seventeen) digit identification number (VIN number) must be affixed to a vehicle. These VIN numbers offer a vast amount of information pertaining to a particular vehicle, hence its importance.

Section 68 (6) of The National Road Traffic Act 93 of 1996 (South Africa, 1996(b)) provides that:

“No person shall-

- (a) with intent to deceive, falsify, replace, alter, deface, mutilate, add anything to or remove anything from or in any other way tamper with the engine or the chassis number of a motor vehicle; or
- (b) without lawful cause be in possession of a motor vehicle of which the engine or chassis number has been falsified, replaced, altered, defaced, mutilated, or to which anything has been added or removed, or has been tampered with in any other way.

In the appeal case *Marvanic Development (Pty) Ltd v Minister of Safety and Security [226] SCA 20 (RSA)*, conducted on 20 March 2006, the honourable Judge Lewis quotes Section 68(6) of the National Road Traffic Act 93 of 1996 ( South Africa, 1996(b)) and explains that it is unlawful to remove a VIN number without lawful cause. The court clearly indicates that a contravention of Section 68(6) of the National Road Traffic Act 93 of 1996 amounts to a

criminal offence, rendering the accused liable on conviction to a fine or imprisonment not exceeding a period of three years.

The Standards Act 29 of 1993 (South Africa, 1993(a)) and the SABS prescribe certain standards with specific reference to motor vehicles and the identification numbers required for all motor vehicles whether manufactured, imported or built.

### **2.3.5 THE STANDARDS ACT 29 OF 1993**

Certain standards, with specific reference to VIN numbers, need to be adhered to by all vehicle manufacturers as well as the builders and importers of motor vehicles. All motor vehicles are required to have a VIN number. Vehicle thieves and robbers will, as soon as possible after the vehicle theft or robbery, attempt to or successfully remove any form of vehicle identification (VIN numbers, tags or stickers) in order for law enforcement authorities not to positively identify the stolen vehicle.

The Standards Act 29 of 1993 (South Africa, 1993(a)) prescribes that all motor vehicles should have a:

- Vehicle Identification Number (VIN)
- World Manufacturer Identifier Code (WMI)

The specifications and location of these numbers are clearly explained according to the Standards Act. As with humans having a unique identification number, all motor vehicles built, whether in South Africa or any other part of the world, have a unique identity in the form of a VIN. The VIN number is also referred to as the chassis number. A VIN can be defined as a structured combination of characters assigned to a vehicle by the manufacturer, for identification purposes (SABS, 1992:1).

World Manufacturer Identifier (WMI) can be defined as the first section of the VIN, which designates the manufacturer of the vehicle. The code is assigned to a vehicle manufacturer in order to allow identification of the said manufacturer and, when used in conjunction with the remaining sections of the VIN, it ensures the uniqueness of the VIN for all motor vehicles manufactured in the world (SABS, 1992:1).

In the following discussion, the SABS requirements of the content and structure of the VIN are outlined in terms of ISO 3779 (South Africa, 1992(a)).

### **2.3.5.1 South African Bureau of Standards (ISO 3779)**

According to the South African Bureau of Standards (1992 (a)), the requirements for a basic VIN shall be:

- World Manufacturer Identification Number (WMI)

This section of the VIN shall consist of three characters, which are pre-assigned to organizations other than the manufacturer.

- Vehicle Descriptor Section (VDS)

This section of the VIN shall consist of six characters and, if the manufacturer does not use one or more of these character spaces, the spaces not used shall be filled by alphabetic or numeric characters of the manufacturer's choice. This section shall identify the general attributes of the vehicle. The coding and sequence of this section are determined by the manufacturer.

- Vehicle Indicator Section (VIS)

This section shall consist of eight characters, and the last four shall be numeric. If the manufacturer chooses to designate year and/or plant in this section, it is recommended that the year be indicated by the VIS and the plant of manufacturer by the second character.

Only the following numerals and capital roman letters shall be used in the VIN:

- 1 2 3 4 5 6 7 8 9 0
- A B C D E F G H J K L M N P R S T U V W X Y Z

The letters I, O and Q shall not be used.

The following diagram illustrates an example of the content and structure of the VIN, in terms of ISO 3779, consisting of the prescribed 17 characters.

**Diagram 2.1: Illustration of VIN content in terms of ISO 3779**

WMI	VDS	VIS
1(1) C P	H4 23 GA	4 G 102745
North America	Series	Model year
USA	Body Style	Assembly Plant
Manufacturer	Engine type	Sequential nr

Roebuck (2012:585(a)) points to the fact that in order to avoid as well as prevent any confusion with numerals 0 and 1 the letters I, O, Q will not be used on a VIN number (also see 2.3.5.1).

The subsequent section highlights the requirements of the location and marking of the VIN in terms of ISO 4030 (South Africa, 1992(b)).

### **2.3.5.2 South African Bureau of Standards (ISO 4030)**

The ISO 4030 (South Africa, 1992(b)) specifies the requirements for the location and marking of the VIN on motor vehicles , trailers, and motorcycles as follows:

#### Vehicle Identification Number (Location)

- The VIN shall be located on the right side of the vehicle and, if possible, on the front half of the vehicle;
- The VIN must be readable from the outside of the vehicle (in the case of enclosed motor vehicles ) it shall be located inside the passenger compartment adjacent to the windscreen pillar; and
- The VIN shall be located in an easily visible position.

The manufacturer of the vehicle may choose whether:

- The VIN is marked on an integral part of the vehicle, either on the frame, or on a body part not easily removed or replaced; or

- The VIN is marked on a separate plate which is permanently fixed to the vehicle.

The following legislation pertains to the Private Security Industry Regulatory Authority (PSIRA) Act 56 of 2001 (South Africa, 2001). The PSIRA Act affirms and contextualises Tracker as a private security service provider.

### **2.3.6 PRIVATE SECURITY INDUSTRY REGULATORY AUTHORITY ACT 56 OF 2001**

The birth of the PSIRA Act 56 of 2001 (South Africa, 2001) repealed “The Security Officers Act 92 of 1987 (South Africa, 1987)” and made way for a new Act due to the rapid expansion and growth of the security industry. This was also sparked by dynamic developments within the security industry, especially in terms of the use of technology in the fight against crime, specifically vehicle related crime (PSIRA, 2001).

Section 1 of the PSIRA Act defines a "security business" as: “any person who renders a security service to another for remuneration, reward, fee or benefit, except a person acting only as a security officer”.

Section 1 of the PSIRA Act defines "security equipment" as-

- (a) an alarm system;
- (b) a safe, vault or secured container;
- (c) a satellite tracking device, closed circuit television or other electronic monitoring device or surveillance equipment;
- (d) a device used for intrusion detection, access control, bomb detection, fire detection, metal detection, x-ray inspection or for securing telephone communications;
- (e) a specialised device used to open, close or engage locking mechanisms; or
- (f) a specialised device used to reproduce or duplicate keys or other objects which are used to unlock, close or engage locking mechanisms.

The PSIRA Act makes provision for, and clearly defines, “security equipment”, such as those used by Tracker to monitor signals, such as satellite tracking devices and surveillance equipment.

In addition, section 1 of the PSIRA Act defines a "security officer" as any natural person-

(a) (i) who is employed by another person, including an organ of State, and who receives or is entitled to receive from such other person any remuneration, reward, fee or benefit, for rendering one or more security services; or

(ii) who assists in carrying on or conducting the affairs of another security service provider, and who receives or is entitled to receive from such other security service provider, any remuneration, reward, fee or benefit, as regards one or more security services; who renders a security service under the control of another security service provider and who receives or is entitled to receive from any other person any remuneration, reward, fee or benefit for such service; or

(b) who or whose services are directly or indirectly made available by another security service provider to any other person, and who receives or is entitled to receive from any other person any remuneration, reward, fee or benefit for rendering one or more security services.

In terms of the PSIRA Act, all operational response services members employed by Tracker are duly registered at PSIRA as security officers, thus adhering to the requirements to be registered as security response officers.

Furthermore, Section 1 of the PSIRA Act defines a "security service" as one or more of the following services or activities:

(a) protecting or safeguarding a person or property in any manner;

(b) giving advice on the protection or safeguarding of a person or property, on any other type of security service as defined in this section, or on the use of security equipment;

(c) providing a reactive or response service in connection with the safeguarding of a person or property in any manner;

(d) providing a service aimed at ensuring order and safety on the premises used for sporting, recreational, entertainment or similar purposes;

(e) manufacturing, importing, distributing or advertising of monitoring devices contemplated in section 1 of the Interception and Monitoring Prohibition Act, 1992 (Act No. 127 of 1992);

- (f) performing the functions of a private investigator;
- (g) providing security training or instruction to a security service provider or prospective security service provider;
- (h) installing, servicing or repairing security equipment;
- (i) monitoring signals or transmissions from electronic security equipment;
- (j) performing the functions of a locksmith;
- (k) making a person or the services of a person available, whether directly or indirectly, for the rendering of any service referred to in paragraphs (a) to (j) and (l), to another person;
- (l) managing, controlling or supervising the rendering of any of the services referred to in paragraphs (a) to (j);
- (m) creating the impression, in any manner, that one or more of the services in paragraphs (a) to (l) are rendered.

The PSIRA Act defines a "security service provider" as a person who renders a security service to another for a remuneration, reward, fee or benefit; it includes such a person who is not registered as required in terms of this Act. In terms of the provisions above, as outlined in section 1 of the PSIRA Act, Tracker is regarded as a private security service provider. Tracker uses technology to monitor signals from its customers' motor vehicles, renders a service to its customers for a monthly contracted fee, and operates in a way to safeguard its clients' motor vehicles. Tracker, however, safeguards an individual's property, i.e. motor vehicle, by means of technology and thus performs both a pro-active and re-active service.

The following discussion deals with the provisions set out in the Electronic Communications Act (ECA) 36 of 2005 (South Africa, 2005). Attention is given to electronic communication, the unlawful interception thereof and the penalties imposed in this regard. Particular attention is given to legislation governing signal blocking devices or "jammers" that are used in vehicle crime, such as motor vehicle theft.

### **2.3.7 ELECTRONIC COMMUNICATIONS ACT 36 OF 2005**

The Independent Communications Authority of South Africa (ICASA) acts as the “regulatory body for the South African communications, broadcasting and postal services sector”. ICASA was established by an Act of Parliament, the Independent Communications Authority of South Africa Act 13 of 2000 (South Africa, 2000(a)). ICASA’s mandate is highlighted, by the Electronic Communications Act 36 of 2005 (ECA) (South Africa, 2005), as providing the “licensing and regulation of electronic communication and broadcasting services”.

In terms of section 1 of the Electronic Communications Act 36 of 2005 (South Africa, 2005), “electronic communication” is defined as:

“the emission, transmission, or reception of information, including without limitation, voice, sound, data, text, video, animation, visual images, moving images and pictures, signals on a combination thereof by means of magnetism radio or other electromagnetic waves, optical, electromagnetic systems or any agency of a like nature, whether with or without the aid of a tangible conduct, but does not include content service”.

In General Notice 3266 of 2002, published in the Government Gazette of 28 November 2002 (South Africa, 2002(a)), ICASA set out specific findings and conclusions regarding mobile telephone blocking devices, also known as signal blocking devices, and commonly referred to as ‘jammers’. “Input was received from various law enforcement agencies. These agencies, specifically security companies and asset tracking companies, who protect assets such as motor vehicles, argued that it would not be in the interest of the SAPS and vehicle tracking companies to authorise signal blocking devices. Indications were that cellular [signal] blocking devices could land in the wrong hands and lead to criminal activity, and subsequently lead to legal and financial liabilities”.

The Independent Communications Authority of South Africa (South Africa, 2002(a)), consistent with its mandate to “manage the radio frequency spectrum and protect public interest, has determined that there appears to be no legitimate radio communication use for cellular blocking devices. ICASA subsequently decided that the use of blocking devices will not be authorised” (South Africa, 2002(a)). In conclusion, the blocking of signals is illegal.

From experience, the researcher points to the fact that criminals who commit vehicle theft or vehicle robbery often utilise signal blocking devices after a vehicle was stolen or robbed in order to activate such signal blocking device to prohibit the tracking company from receiving GPS/GSM signals from the tracking unit, thus blocking transmission of a signal. Without these active signals being transmitted by the stolen/robbed vehicle's tracking unit, the vehicle tracking company will find it nearly impossible to recover such a vehicle while the signal blocking device or (jammer) is activated.

Section 35 of the Electronic Communications Act 35 of 2005 (South Africa, 2005) provides as follows:

- (1) no person may use, supply, sell, offer for sale or lease or hire any type of electronic equipment or electronic communications facility, including radio apparatus, used or to be used in connection with the provision of electronic communications, unless such equipment electronic communications facility or radio apparatus has, subject to subsections (2), been approved by the authority.

It is clear that the use of signal 'jammers' to conduct unlawful acts is prohibited. A signal blocking device found in possession of a person constitutes a criminal act, according to Section 82 of the Third Law Amendment Act 129 of 1993 (South Africa, 1993(a)), as stated and discussed in 2.2.2. The Electronic Communications Act makes it an offence to use, sell, offer for sale or lease or hire an electronic apparatus if such apparatus has not been approved. The apparatus referred to is a signal blocking device or "jammer".

The Regulation of Interception of Communications and Provisions of Communication-related Information (RICA) Act 70 of 2002 (South Africa, 2002(b)) follows, for discussion. RICA is a law passed by the SA government that regulates the interception of communications, the monitoring of radio signals and radio frequency spectrums and the provision of communication-related information.

### **2.3.8 REGULATION OF INTERCEPTION OF COMMUNICATIONS AND PROVISIONS OF COMMUNICATIONS-RELATED INFORMATION ACT 70 OF 2002**

Section 49(1) of the RICA makes provisions for the unlawful interception of communication:

“Any person who intentionally intercepts or attempts to intercept, or authorizes or procures any other person to intercept or attempt to intercept, at any place in the Republic, any communication in the course of its occurrence or transmission is guilty of an offence”

Section 51(1)(b) provides the following:

“any person who is convicted of an offence referred to in

- (i) Section 49(1) is liable to a fine not exceeding R2 000 000 or to imprisonment for a period not exceeding 10 years.

From the provisions of RICA, it is clear that this Act makes the unauthorised interception of communication, including signals, to be a punishable offence and it indicates that the RICA will cover the actual conduct of unlawful interception of signals. The researcher concludes that the two Acts, namely the ECA and the RICA, work in synergy and even tie up with the Criminal Procedure Act 51 of 1977 (South Africa , 1977).

Section 250 of the Criminal Procedure Act 51 of 1977 (South Africa, 1977) refers to:

Presumption of lack of authority

(1) If a person would commit an offence if he-

(a) carried on any occupation or business;

(b) performed any act;

(c) owned or had in his possession or custody or used any article; or

(d) was present at or entered any place, without being the holder of a licence, permit, permission or other authority or qualification (in this section referred to as the 'necessary authority'), an accused shall, at criminal proceedings upon a charge that he committed such an offence, be deemed not to have been the holder of the necessary authority, unless the contrary is proved.

## **2.4 CONCLUSION**

The Constitution is the supreme law of the Republic of South Africa and governs all its other laws, and establishes the need for private security companies to assist in fighting crime within

the parameters of the law, as well as forming partnerships to fight and combat crime. It is concluded that there is an array of laws within the South African criminal justice system to address vehicle related crimes, such as vehicle theft and vehicle robbery. The legislation related to theft is overarching in nature, and covers all aspects from breaking into the vehicle to the theft/robbery thereof, as well as being in possession of a stolen motor vehicle. The main element of robbery is the use of violence or the threat of violence to commit such crime. The current SA legal system is adequate with regard to firearms associated with robbery, although it is not clear whether suspects are charged with all the relevant legislation when arrested. The researcher is of the opinion that if all suspects are timeously arrested for vehicle theft or vehicle robbery, they should be charged with all the relevant charges in order to:

- Recover property
- Oppose bail successfully
- Secure a conviction in a criminal court.

Partnerships between the government, broader criminal justice system and the private security sector are crucial in order to effectively address the fight against motor vehicle crime. The SAPS/Tracker partnership has been a successful initiative since 1997, and more emphasis should be placed on these kinds of successful partnerships in the combatting of motor vehicle related crimes in South Africa.

## **CHAPTER 3            AN OVERVIEW OF VEHICLE CRIME AND THE APPLICATION OF VEHICLE TRACKING TECHNOLOGY IN SOUTH AFRICA**

### **3.1        INTRODUCTION**

This chapter provides an overview of the nature and extent of motor vehicle crimes in South Africa, with particular reference to motor vehicle theft and motor vehicle robbery, also known as motor vehicle hijacking. This chapter further provides an outline of the application of vehicle tracking technology in response to motor vehicle crimes in the country. The various role players involved in combating motor vehicle crimes and the application of vehicle tracking technology in the South African context, as well as the existing partnership between Tracker and the SAPS provide the foundation of this chapter. This chapter is also characterised by a brief overview of the application of vehicle tracking technology internationally. The focus, in terms of the application of vehicle tracking technology, has been limited to LoJack vehicle tracking technology as utilised by Tracker and various international countries.

Vehicle theft in South Africa has become an everyday occurrence and has become a way of life for vehicle thieves and syndicates. Technological developments, such as LoJack vehicle tracking technology, facilitate the timeous recovery of stolen motor vehicles. Due to the advancements in technology and the provision of the South African Constitution to form partnerships with the police, Tracker and the SAPS joined forces to combat vehicle related crimes. The researcher is of the opinion that technology should be optimally utilised to assist the SAPS in combatting vehicle related crime. The mere fact that technology is fitted to a vehicle ensures speedy recovery if or when the vehicle is stolen. This statement is supported by Weber (2009:217) who comments that technology such as vehicle tracking devices or systems is an effective method to speedily and accurately locate, recover and reunite stolen/robbed motor vehicles with their lawful owners; these devices are also referred to as ‘after-theft systems’

An overview of vehicle crimes in South Africa follows for discussion. This overview is specifically focussed on the nature and extent of vehicle theft and vehicle robbery in South Africa.

### 3.2 OVERVIEW OF VEHICLE CRIMES IN SOUTH AFRICA

“We have no choice but to come together in the fight against crime. With vehicle safety technology and a more co-ordinated effort between the SAPS and the National Prosecuting Authority, we can make great strides against criminals” (*Tracker*, 2015(a)). According to Gonzalez-Navarro (2008:1), motor vehicle theft is an “extremely salient property crime: the value of the stolen motor vehicles is substantial and there is often violence involved in the commissioning of the crime. Vehicle theft can be seen as a conflict between vehicle owners, the authorities and vehicle manufactures, on the one hand, with a clear aim to minimise vehicle theft, and criminals, on the other hand, trying to gain from these thefts”.

The previous Police Minister, Nathi Mthethwa (2013), stated that the SAPS faces some of the most hardened and dangerous criminals on a daily basis, not forgetting the violent nature of crime in South Africa. These violent crimes include vehicle robbery. Mthethwa (2013) further states that the SAPS cannot achieve its crime reduction goal without the assistance of the private sector, as well as the general public. The assistance between government, the private sector as well as the general public is extremely important in fighting crime. According to Statistics South Africa Statistical Release: Victims of Crime Survey, (2012:21), more than a third of households in Gauteng (35,3%) and about 31,3% in the Western Cape took physical protection measures to protect their motor vehicles , which was much higher than the figures for Limpopo and the Eastern Cape, where only 10,4% and 13,8%, respectively, of households took these measures.

De Klerk (2013:1) explains that a motor vehicle is used in the majority of crimes and that the vehicle can be used to:

- Transport / hide a victim
- Get to the crime location
- Act as the get-away vehicle
- Transport stolen goods
- Act as a “weapon”.

In an online article posted on Africa Check (2014), in conjunction with the Institute for Security Studies (ISS) Crime Hub (*Factsheet: South Africa's official crime statistics 2013/2014*, 2014), the 2013/2014 national SAPS crime statistics indicate that South Africa from a crime reduction angle experienced two of the worst years in the last 10 years. The researcher is of the opinion that through partnerships such as the SAPS/Tracker partnership, as discussed in section 3.5, and the application of vehicle tracking technology, motor vehicle theft and robbery could be managed and addressed more effectively.

According to the national SAPS crime statistics for the period 2013/2014, it is clear that vehicle related crimes, especially the robbery of motor vehicles, have increased. At the same time, there has been a very slight decrease in the theft of motor vehicles. (South African 2014(c)) From the researcher's experience, criminals are more prone to resort to the robbery of a vehicle in order to take control of the property in an easier and faster way, as opposed to the theft of the vehicle, due to the constant improvement of security features by motor vehicle manufacturers.

The South African community is confronted, almost on a daily basis, with media reports on vehicle robberies or thefts that took place, such as:

- *3 Month old Baby survives hijacking ordeal* (Dipa, 2015:1);
- *Crime stats SA: 11000+ cars hi jacked* (*Wheels 24*, 2014);
- *SA's ticking time bomb of vehicle crime* (*News 24*, 2015(a)); and
- *Vehicle crime increasing* (*News 24*, 2015(b)).

These media reports reflect only a small number of the actual incidents of motor vehicle theft and robbery that frequently occur in South Africa. The nature and extent of motor vehicle theft in South Africa follows for discussion. This discussion contextualises the dynamics of vehicle theft in South Africa.

### **3.2.1 The nature and extent of motor vehicle theft in South Africa**

According to Steenkamp (1999:1), the fact that SA is the only Sub Saharan country in which motor vehicles are manufactured, creates a hunting ground for the potential motor vehicle thief. According to the South African Insurance Crime Bureau (2014(b)), the theft of motor vehicles costs the SA economy a staggering R8.5 billion annually. Putting this figure into perspective, an astounding 156 motor vehicles are stolen every 24 hours within South Africa

(SA vehicle theft: 156 gone in 24 hours, 2014). According to the SAPS Annual Performance Plan for 2013/2014 (South Africa, 2014(d):100), only 28 892 recovered stolen motor vehicles could be positively linked to their lawful owners. This Annual Performance Plan (2014(d):100) further indicates that the SAPS aim to recover 46% of reported stolen motor vehicles. The researcher points to an article by Evans (2015) (*The SA Police Service (SAPS) has failed to meet several crime reduction targets it set itself for the period 2014/15*). However, the target of recovering 46% of stolen motor vehicles, as discussed in section 1.3, was exceeded and a recovery rate of 52.9% was achieved by the SAPS. The researcher is inclined to believe that this increase in stolen vehicle recovery is due to the use of vehicle tracking technology.

The SAPS official crime statistics (South Africa, 2014(c)) for 2010/2011, 2011/2012 and 2013/2014 reveal the following figures related to vehicle theft:

- During the 2010/2011 financial year a total number of 64 504 thefts of motor vehicles occurred.
- During the 2011/2012 financial year a total number of 59 097 thefts of motor vehicles occurred.
- During the 2012/2013 financial year a total number of 58 370 thefts of motor vehicles occurred.
- During the 2013/2014 financial year a total number of 56 870 thefts of motor vehicles occurred, indicating a decrease of 2,6% in the theft of motor vehicles from the 2012/2013 figures.

According to the SAPS Annual Crime Statistics 2013/2014 (South Africa, 2014(c)), released by the Minister of Safety and Security, Nkosinathi Nhleko, on 17 September 2014 it was confirmed that vehicle theft and the subsequent recovery of stolen motor vehicles is a significant problem that poses immense challenges for the SAPS. The Minister emphasised, in his address on the release of the 2014 SAPS national crime statistics, that property crime, such as vehicle theft, is a “stubborn crime”. In a recent newspaper article, Van Wyk (2015:1) emphasised once again how tenacious property crimes, such as vehicle crimes, are.

The researcher is inclined to believe that the slight decrease in the theft of motor vehicles during the 2013/2014 financial year is due to the development of more advanced security mechanisms built into newer motor vehicle models. However, the advancement in motor vehicle security technology could contribute to the increase of motor vehicle robbery, as stated by the SAPS (South Africa, 2014(c):11). Altbeker (2006:1) concurs with this view, by stating that the statistics suggest that when a decline in the theft of motor vehicle is experienced, there would be an increase in robberies. According to Ron Knott-Craig, the operations director of Tracker, the SAPS/Tracker partnership secured the recovery of 67 000 stolen and robbed motor vehicles Tracker / SAPS partnership effected well over 13 000 arrests of motor vehicle criminals (*Tracker*, 2014(a)).

According to Statistics South Africa Statistical Release: Victims of Crime Survey (2012:47), conducted in SA, amongst the motor vehicles that were stolen, 58,9% were stolen at the victim's home, while only 9,8% were stolen outside an office, shop, mall or at the victim's place of work. Motor vehicle theft (26,6%) occurred predominantly in the morning hours, whilst a further 21,3% took place between midnight and dawn. Only 15,4% of motor vehicle theft occurred during the night. Statistics South Africa Statistical Release: Victims of Crime Survey (2012:49) further indicates that motor vehicle theft (40,5%) is most likely to happen over a weekend. Linden and Chaturvedi (2005:256) are of the belief that a large percentage of vehicle thefts are committed by repeat offenders. Linden and Chaturvedi. (2005:256) are of the opinion that a fairly small number of repeat offenders are responsible for a large percentage of re occurring vehicle thefts and robberies. This appears to be true for both so-called "joyriders" and "professional vehicle thieves". The researcher agrees with this notion, and often finds that vehicle thieves and vehicle robbers are re-arrested for similar crimes; the researcher therefore believes that vehicle theft is committed by repeat offenders.

According to Zinn (2002:69), the actions executed by vehicle thieves in order to steal motor vehicles are time consuming; these actions include breaking the door locks, bypassing the alarm system and immobilizer, and breaking the ignition switch and the steering lock. Zinn found, in a study conducted in 2002 that this time factor is considered a risk in being caught by the respondents interviewed and, therefore, 76% of the respondents in the study reverted to robberies as opposed to vehicle theft. The researcher is of the opinion that these findings support a possible reason for the drop in vehicle theft in 2013/2014 and, therefore, criminals became more prone to vehicle robbery than vehicle theft.

A discussion on the nature and extent of vehicle robbery in SA follows.

### **3.2.2 The nature and extent of vehicle robbery in South Africa**

In his study, Zinn (2002:69) found that vehicle robbery is profitable, delivers quick cash to the robber and is quite easy to perform. Zinn's findings summarise the nature of motor vehicle robbery in SA. According to a crime and safety report by the, United States Department of State: Bureau of Diplomatic Security (2014), The United States Government remains concerned about the level of crime in South Africa. The report also specifically mentions that a major concern is the amount of force and violence used during these robberies in SA. According to Statistics South Africa Statistical Release: Victims of Crime Survey (2012:56), the use of a firearm is prevalent in vehicle robberies (91,2%). In support of this survey, a study conducted by Zinn (2002:73) confirms that motor vehicle robbers will even "cock" the firearm they use during motor vehicle robberies in order to create more distress for their victims. Zinn is also of the opinion that the "cocking effect" of the firearm and the sound created increases the distress level when a motor vehicle is robbed. These findings are supported by Kruger and Landman (2007:79) who are of the view that robbers will not hesitate to injure their victim or even resort to shooting and killing a victim or victims when committing a crime such as motor vehicle robbery, is of particular concern.

In order to highlight the extent of motor vehicle robbery in SA, the official SAPS crime statistics for 2013/2014 (South Africa 2014(c)) indicate the following figures:

- During the 2010/2011 financial year, a total of 10 627 motor vehicles were robbed
- During the 2011/2012 financial year, a total of 9 475 motor vehicles were robbed
- During the 2012/2013 financial year, a total of 9 990 motor vehicles were robbed
- During the 2013/2014 financial year, a total of 11 221 motor vehicles were robbed

According to an analysis of the National Crime Statistics Addendum to the Annual Report of 2013/2014 (South Africa, 2014(b):25), motor vehicle robberies have over the past 10 years (2009/10-2013/14) decreased by 9,8% ; and by 19,3% during the past five years (2009/10-2013/14); however, motor vehicle robberies have drastically increased by 12,3% during the 2013/2014 financial year. This analysis further indicates that Gauteng had the highest increase (22.5%) in motor vehicle robberies, amounting to 1 112 cases reported to the SAPS.

In addition, this SAPS analysis (2014(b):11) indicates that the majority of motor vehicle robberies occur in the driveway of victims usually going to or returning from work.

In support of the National Crime Statistics Addendum to the Annual Report of 2013/2014, the Institute for Security Studies, Crime Hub (2014:4), reported that there has been an overall increase in all classifications of robbery, including motor vehicle robbery, during the 2013/2014 period. These crimes are also referred to as “violent property crimes”. The increase of vehicle robberies, by 12.3% to 11 221, indicate that, on average, 31 motor vehicles had been robbed in SA daily in 2013/2014. These disturbing figures are further highlighted by Van Wyk’s (2015:1) statement that motor vehicle robberies indicated an increase of 14,4% during the first ten months of the 2014/2015 financial year as opposed to the same period in the 2013/2014 financial year. As rightly described by Snyman (2014:580), supported by Lebeya (2012:375), robbery is customarily described as “theft by violence”.

The ISS, Crime Hub (2014:5), interestingly indicates that in the years when a decline was experienced in common robbery such as taking a victims cell phone, wallet or even watch, other more serious types of robberies, such as vehicle robbery, increased substantially. The article mentions that common street robberies were reduced as a result of the improved visible policing strategies by the SAPS. This increased visibility by the SAPS, however, resulted in robbers opting to target houses, businesses and motor vehicles instead. In his study of convicted robbers, Zinn (2002:109) found that 50% of the respondents interviewed (hijackers) were members of a syndicate or gang that robbed motor vehicles. Zinn (2002: 65-68) also found the following during his study:

- 47% of the respondents were unemployed
- 73% of the respondents had no form of military training
- 67% of the respondents possess a grade 10 to grade 12 qualification.

The researcher believes that the figures indicated by Zinn (2002) suggest the high unemployment rate among respondents and the fact that a large number of respondents only acquired a high school qualification, or lower, could easily be lured into becoming a member of a vehicle robbery syndicate or robbery gang. These vehicle robbers could thus be further motivated by the belief, as mentioned in 3.2.2, that vehicle robbery is profitable, delivers quick cash and is very easy to perform.

### **3.2.3 The South African Police Service's response to vehicle theft and vehicle robbery**

According to the SAPS Annual Performance Plan of 2013/2014 (South Africa, 2014(d)), no vehicle theft investigator's course was presented in 2013 and 2014. This resulted in no police officers receiving training in the SAPS Vehicle Identification Course for this period. This lack of training among police officials clearly poses a huge burden on the SAPS to effectively combat and investigate vehicle crimes, such as vehicle theft and vehicle robbery. The SAPS Strategic Plan 2014/2019 (South Africa, 2014(e):67), however, provides for the following number of courses to be presented and the following number of members to be trained in the Vehicle Investigator's Course:

- 2015/2016 – 4 courses and 100 members to be trained per course;
- 2016/2017 – 5 courses and 125 members to be trained per course;
- 2017/2018 – 5 courses and 125 members to be trained per course;
- 2018/2019 – 5 courses and 125 members to be trained per course;

Although the SAPS identified a number of Vehicle Investigator's Training Courses to address vehicle crimes in SA, the researcher is of the opinion that it takes time to gain experience in the field of motor vehicle investigation as it is a specialised function. Therefore, immediate success rates, such as sufficient arrest and conviction rates of perpetrators and the recovery of stolen or robbed motor vehicles will not be immediately evident. As a result, vehicle tracking technology could play a significant role in the arrest and conviction rates of perpetrators and support of the investigation of motor vehicle related crimes, as well as the recovery of stolen or robbed motor vehicles.

The SAPS has, over recent years, closed down specialised units, such as the SAPS Vehicle Theft Unit, and initiated various special operations or task teams in order to combat vehicle related crimes. A brief overview of these specialised units (with particular focus on units that address vehicle related crimes), special operations, task teams, and the SAPS units which deal with vehicle related crimes follow for discussion.

Goga (2014:66-67) mentions that, after 1994, the "SAPS comprised of about 500 specialised units", which included units such as the SAPS Vehicle Theft Unit. However, in 2001, the

SAPS decided that specialised units such as the SAPS Vehicle Theft Unit would be redeployed into the broader SAPS in accordance with government's strategy.

Burger (2014) further explains that, J. Selebi, former National Commissioner of the SAPS, announced in 2001 that SAPS specialised investigative units would be fused into only three units:

- Organised crime unit
- Violent crime unit
- Commercial crime unit

As a result, specialised units were closed down, and the function of the SAPS Vehicle Theft Unit was taken over by the SAPS organised crime unit. According to Goga (2014:66-67), the redeployment of specialised unit members to police stations, as was the case with SAPS Vehicle Theft Unit members, did not have the anticipated outcome, and led to a breakdown in relations between the SAPS and the community. Consequently, the SA cabinet in September 2012 recommended that specialised units, including the SAPS Vehicle Theft Unit, be re-established (Burger, 2014). The following special operations or task teams have been established over the past few years in order to combat vehicle related crimes:

▪ **Operation “Ngena”**

During 2003 in response to the escalating rate of vehicle robberies in Gauteng, the SAPS launched Operation *Ngena* (go get them) in the Gauteng province in 2003, with a very clear mandate to address the high rate of motor vehicle robberies in Gauteng immediately. The operation consisted of SAPS Crime Intelligence operatives tasked in identifying suspected criminals and criminal syndicates responsible for motor vehicle robberies, a SAPS Rapid Response Unit to affect the arrest of the suspects, as well as a SAPS Detective Unit for preparing case dockets and seeing the matter through to criminal court. Newham (2015:13) explains that, during the execution of operation *Ngena*, a 36 % reduction was experienced in motor vehicle robberies. Newham (2015:13) also states that, although very successful, Operation *Ngena* was subsequently disbanded in 2007. Furthermore, Newham (2015:13) is of the opinion that the success rate of Operation *Ngena* with regard to motor vehicle robbery

has been phenomenal and, since the abandonment of Operation *Ngena*, Gauteng province has seen an increase in motor vehicle robberies (see 3.2.2).

▪ **Operation “Duty Calls”**

According to Mnisi (2013), the SAPS Chief Director: Communications/Spokesperson, on the 15<sup>th</sup> of October 2012 Operation “*Duty Calls*” was officially launched by the SAPS and this operation officially ended on 31 January 2013. This operation resulted in:

- 1 477 901 persons searched,
- 501 373 motor vehicles searched,
- 3614 roadblocks conducted,
- 451 stolen motor vehicles recovered,
- 721 firearms recovered,
- 7689 rounds of ammunition recovered, and
- 296 suspects arrested for theft of a motor vehicle.

Mnisi (2013) also stated that the successes achieved by operation “*Duty Calls*” can be attributed to “smart policing, which was built around utilising information, communication and technology” to fight crime. The researcher is of the opinion that the technology that Mnisi refers to includes vehicle tracking technology.

▪ **Operation “Paseka”**

According to the South African Police Service (South Africa, 2015(c)), During April 2015 during the Easter holidays Operation “*Paseka*” was implemented. Its aim: reduce serious and violent crimes, including business house as well as motor vehicle robberies, as well as theft of/from motor vehicles. As part of the operation, the SAPS conducted:

- road blocks on all major routes,
- ‘stop and search’ exercises,
- patrols, and
- surprise visits to second hand goods dealers in search of stolen property.

- **Gauteng Aggravated Robbery Strategy**

The Gauteng Aggravated Robbery Strategy, a combined initiative between the SAPS in Gauteng and the Gauteng Department of Community Safety, was implemented from January 2009 to January 2011. This Strategy focused primarily on the so-called “Trio Crimes” (vehicle robbery, house robbery and business robbery) and successfully contributed to a 32% reduction in vehicle robberies, 21% reduction in residential burglaries and 20% reduction in business robberies between 2009/10 and 2011/12 (Newhman, 2015:13). Furthermore, the SAPS have implemented other initiatives in response to vehicle crimes. In this regard, Mbatha (2004) quotes Captain Wagner as stating the following: "We [the SAPS] also established the fact that syndicates are usually the ones behind cash-in-transit heists, robbery and armed robberies. We [the SAPS] too had to work smart and incorporate SAPS detectives, intelligence and a tracking unit, hence, the implementation of Operation *Thathazonke* (take everything), which infiltrates syndicates at all levels, as well as the implementation of Operation *Ngena* – our [the SAPS] anti-robbery wing."

- **SAPS Anti-Hijacking Task Teams**

According to Brown (2006:77), seven (7) SAPS specialised Anti-Hijacking [Robbery] Task Teams were established in Gauteng to focus almost entirely on motor vehicle robberies. This Anti-Hijacking [Robbery] strategy has assisted in developing eight (8) specialized robbery courts, each dedicated to dealing with motor vehicle robbery cases. These Anti-Hijacking [Robbery] Task Teams were headed-up by a co-ordinator and included an SAPS investigative element responsible for investigating motor vehicle robbery incidents and seeing the docket through criminal court. In addition, each task team was comprised of a SAPS crime intelligence element responsible for gathering intelligence on motor vehicle robbery syndicates and individuals and ensuring that these syndicates are identified and as much intelligence as possible is gathered regarding the modus operandi of the syndicate or individual. Furthermore, these task teams each had a SAPS Rapid Response Unit that was responsible to arrest the motor vehicle robbers as well as high speed chases of fleeing suspects, if needed. These seven Anti-Hijacking [Robbery] Task Teams consisted of more than 250 police officers. The SAPS specialised Anti-Hijacking [Robbery] Task Teams were subsequently disbanded. The SAPS: Rapid Response Units were also disbanded and unit

members were sent to the various SAPS Flying Squad Units within Gauteng. Members of the Crime Intelligence Units were subsequently redeployed at various police stations in Gauteng. The detectives specialising in violent motor vehicle related crimes, such as robbery, were also tasked to return to the general detective branch at station level within their province.

▪ **SAPS Vehicle Identification Unit**

The SAPS Vehicle Identification Unit is an investigative arm within the SAPS mandated to investigate and focus on vehicle related crimes such as motor vehicle theft and motor vehicle robbery. This unit identifies stolen or robbed motor vehicles as soon as the motor vehicle is recovered. This unit further ensures that a suspect arrested on account of motor vehicle theft or motor vehicle robbery is charged accordingly, and sees the case docket through the criminal court process. According to South Africa (2013). *Police, Defense and Intelligence 2013 SA Year Book* (2013), the SAPS has Vehicle Identification Units countrywide. This unit's functions include:

- identifying stolen or robbed vehicles
- and investigating such cases
- issuing SAPS vehicle identification numbers
- controlling SAPS vehicle clearance offices
- controlling unique marking of vehicles
- activities relating to the registration of vehicle manufacturers, importers and builders
- concluding investigations into motor vehicles forfeited to the state, and
- assisting local detective units with Interpol vehicle enquiries.

▪ **SAPS International Vehicle Crime Investigation Unit**

The SAPS initiated an International Vehicle Crime Investigation Unit, based at the SAPS national head office in Pretoria. This unit is solely responsible for the recovery and repatriation of motor vehicles stolen or robbed within the Republic of South Africa and that have crossed over the border into neighbouring countries. The unit is also operational in Botswana, Lesotho, Mozambique, Swaziland and Zimbabwe. According to the SAPS Strategic Plan 2014/2019 (South Africa, 2014(e):17), the effective combatting of transnational crimes will receive priority focus by means of:

- cross border policing
- international motor vehicle crime investigation and repatriation of stolen and robbed motor vehicles .

The SAPS International Vehicle Crime Investigation Unit functions very closely with the International Police (INTERPOL), the Southern African Regional Police Chiefs Co-operation Organisation (SARPCO), the International Vehicle Crime Investigation Unit, and the police departments from the various countries of the SARPCO.

The following discussion provides an overview of criminals' motives for motor vehicle crimes, particularly vehicle theft and vehicle robbery.

### **3.3 MOTIVES FOR COMMITTING MOTOR VEHICLE CRIMES**

According to Swanson, Chamelin and Territo (2015:15-3), motor vehicle theft generally falls into one of four categories: “temporary theft, joy riding, professional theft or fraud”.

- Temporary theft: The term “temporary theft” is used to distinguish joyriding from professional theft
- Joyriding: “Joyriders” misappropriates a motor vehicle to drive around and then leave it.
- Professional theft: The “professional car thief” misappropriates a motor vehicle to make a cash profit.
- Fraud: This is generally committed by a motor vehicle owner embezzle the insurance company.

Swanson et al. (2015:15-4) further state that vehicle thieves utilise a variety of techniques to dispose of stolen motor vehicles. These techniques include the following:

- ‘Chop shops’: A vehicle ‘chop shop’ is a workshop or a garage where stolen motor vehicles are stripped in order to sell the motor vehicle parts such as the engine, gearbox and chassis airbags and mag wheels .

- Quick strip: A motor vehicle is stolen and stripped mainly to re-sell accessories such as airbags, car seats, car radios, tyres as well as mag wheels.
- Salvage switch: For the motor vehicle thief, a “salvaged vehicle” has a much bigger monetary value than its parts.
- Export: Motor vehicles build/ manufactured in the USA are very popular in other countries.
- Fraud: Registering fraudulent motor vehicle theft and robbery insurance claims.

Swanson et al. (2015:15-4) are supported by Brandl (2014:414) who states that the primary motivation for motor vehicle theft can be described as:

- Profit (for the motor vehicle thief or robber)
- Insurance fraud (by the motor vehicle owner or a third party)
- Misappropriation for fun (Joyriding)
- Selling the motor vehicle after doing modifications to the motor vehicle (for example, tampering with the VIN number)
- Stripping the motor vehicle for parts (airbags, gearbox and engine).

According to Brandl (2015:414), there are two main reasons for motor vehicle theft:

- Profit
- Joyriding.

Due to motor vehicle theft and robberies profit-driven nature, as discussed by Brandl (2015:414) and Swanson et al. (2015:15-4), motor vehicle criminals will normally identify and target a specific make and model as well as colour of a motor vehicle that is high in demand or that is specifically requested (“ordered” by vehicle crime syndicates or individual criminals) in order to either sell the stolen or robbed motor vehicle after doing modifications (such as tampering with the VIN number) or strip the motor vehicle for spare parts (such as

the airbags, engine or gearbox) and then sell it to a third party. Zinn (2002:108-109) found, in his study on incarcerated vehicle robbers, that the average amounts paid to a motor vehicle robber in SA for specific motor vehicles are as follows:

<b>Type</b>	<b>Model</b>	<b>Price</b>
Sedan	BMW	R14 500-00
Sedan	Mercedes Benz	R18 700-00
Sedan	Toyota Corolla	R900-00
Light Duty Vehicle (LDV)	Any 4X4	R10 250-00
LDV	Toyota Hi Lux	R11 00-00
LDV	Toyota Land Cruiser	R8 500-00

The researcher agrees with the various motivations for committing motor vehicle crimes, as mentioned above. However, from the researcher's experience in the South African context, motor vehicles are also robbed or stolen by criminals who have secondary motives. These motives include fleeing a crime scene in which these criminals were involved, for example, house robberies or bank robberies; committing other offences, such as transporting narcotics or using the motor vehicle as a transport method to commit another motor vehicle theft or robbery in another area; or even using the stolen motor vehicle to commit serious offences such as Automated Teller Machine (ATM) bombings.

### **3.4 MODUS OPERANDI OF CRIMINALS COMMITTING MOTOR VEHICLE THEFT AND ROBBERY**

Van der Westhuizen (1996:32) concurs with Horgan (1979:57) and Van Heerden (1985:10) who explain modus operandi as the “customs and practices” or a specific method of operation of criminals. Du Plessis (in Van der Westhuizen, 1996:34) stresses the crucial importance of collecting modus operandi information from a suspect as well as analysing different crime forms to both crime investigation as well as crime prevention. Van der Westhuizen (1996:34) is quoted and explains that the reasoning for studying and classifying modus operandi can be summarised:

- A comprehensive classification which has extensive potential for legal substantiation.
- A system which fulfils the need to analyse, describe, arrange, study, classify and document observable phenomena in a scientific way for future identification, comparison and individualisation.
- An opportunity to store classifiable information effectively, to make it easily accessible and retrievable so that it can meaningfully be used in practise.
- Ways and means to associate various crimes positively with individual offenders so that such cases can be investigated speedily and thoroughly and be tried successfully.
- Specialised knowledge on various aspects which serves to justify the tactical, careful and systematic study of classification possibilities of relatively universal modus operandi criteria by the criminal investigator.

Brandl (2014:414) explores the modus operandi of motor vehicle theft and concludes that motor vehicle crime is generally committed in two ways, namely:

Unsophisticated motor vehicle theft techniques:

- The motor vehicle thief will unlawfully and intentionally misappropriate a motor vehicle while the key is still in the ignition switch and there is nobody in the motor vehicle.
- The thief will misappropriate a motor vehicle while the engine is still idling, and

- The thief will snatch the motor vehicle keys from the lawful owner and then unlawfully and intentionally misappropriate the vehicle.

The researcher notes that, in the South African context, as discussed in 3.3, vehicle thieves also snatch vehicle keys from a unsuspecting owner in a shopping mall by means of pick pocketing, after the owner was identified in the parking area. The thieves then return to the parking area and steal the vehicle while the owner is still in the shopping centre. It is also noted, in section 3.3 of this study, that thieves will break into a house and, if vehicle keys are found, the thief will use the vehicle to transport the stolen goods that were taken during the house breaking.

Brandl (2014:414) summarises this type of theft as the “typical opportunistic theft” where the perpetrator sees an opportunity due to the “negligence” of the motor vehicle owner.

Sophisticated vehicle theft techniques include:

- Hot wiring a motor vehicle by breaking the steering mechanism and by-passing the immobilizer, alarm and the ignition system of the motor vehicle.
- Towing the motor vehicle.
- Bump and run, where a second motor vehicle is used by the criminal syndicate or criminal gang to bump a motor vehicle and as soon as the owner stop and gets out to inspect the damage to his/her motor vehicle another perpetrator will get in the motor vehicle and drive away thus misappropriating the vehicle.

The researcher agrees with Brandl (2014:414), but notes that, in the South African context, the ‘bump and run’ technique is used in motor vehicle robberies. Another typical motor vehicle robbery technique used in SA is that of pulling up next to an unsuspecting driver and indicating that there is a flat tyre or that the number plate has fallen off. When the driver stops, he or she is robbed. The other common techniques employed by vehicle criminals are the use of “jamming” devices (see 2.3.7.) Criminals activate these jamming devices as soon as a non-suspecting victim remotely locks his/her motor vehicle, thus resulting in the motor vehicle’s door locking device being deactivated. The victim is under the impression that the motor vehicle’s alarm system has been activated and the doors locked, and the criminal soon drives off with the motor vehicle (see 2.2.3). These jamming devices were also identified as a significant challenge in the theft of motor vehicles by the SAPS (South Africa, 2014(d):11) and ICASA (South Africa, 2002(a)).

In his study, Zinn (2002: 74-91) found the following with regard to a robber's modus operandi:

- Robbers stay on average between 30 and 45 minutes from their operating area;
- Intimidation tactics such threat of using violence or physical violence such as , “pistol whipping”, assault, and even shooting a victim, are used;
- Offenders use a motor vehicle to get to the crime scene;
- 22% of the respondents committed a robbery in the driveway of the house of the victim;
- 11% of the respondents chose to commit a robbery at a T-junction.

Zinn (2002:66) further found the following phenomena regarding incarcerated motor vehicle robbers (as the respondents) in his study:

- 37% of the respondents interviewed changed their hiding place every 2-3 days
- 18% of the respondents interviewed changed their hiding place every 1-2 weeks
- 45% of the respondents interviewed changed their living place every 3-6 months.

The researcher is of the opinion that the identification of the modus operandi followed by a perpetrator who commits motor vehicle theft and robbery is of extreme importance, as the methods and habits used to commit these crimes will assist in addressing motor vehicle crime and may lead to an overall reduction of motor vehicle crime in SA.

Given the extent and nature of motor vehicle crimes in SA, the combatting of these crimes, specifically motor vehicle theft and motor vehicle robbery, requires a multi-sectoral approach. As a result, a number of important role players across various sectors are closely involved in addressing vehicle crimes in the country. A discussion on these role players follows, in order to contextualise their role in the combatting of motor vehicle crimes.

### **3.5 PROMINENT SOUTH AFRICAN ROLE PLAYERS INVOLVED IN COMBATTING MOTOR VEHICLE CRIMES**

The following role players play a significant role in combatting vehicle related crimes:

### **3.5.1 SOUTH AFRICAN POLICE SERVICE**

The SAPS has both a Constitutional and legislative mandate to prevent, combat and investigate vehicle related crimes.

#### **3.5.1.1 Constitutional mandate of the South African Police Service with regard to the policing of vehicle related crimes**

The South African Police Service: Strategic Plan 2010-2014 (2010:3) explains that the mandate of the SAPS is derived from Section 205 of the Constitution of the Republic of South Africa, Act 108 of 1996. The objectives of policing are to:

- Prevent, combat and investigate crime,
- Maintain public order,
- Protect and secure the inhabitants of the Republic and their property, and
- Uphold and enforce the law.

#### **3.5.1.2 Legislative mandate of the South African Police Service with regard to the policing of vehicle related crimes**

According to the South African (2010:3) South African Police Service: Strategic Plan 2010-2014, the SAPS is responsible for the administration of the following legislation, which has been taken into consideration during the determining of the strategic priorities and objectives for the SAPS:

The South African Police Service Act 68 of 1995 (South Africa, 1995) states that there is a need to provide a police service throughout the national territory to:

- ensure the safety and security of all persons and property in the national territory;
- uphold and safeguard the fundamental rights of every person as guaranteed by Chapter 2 of the Constitution;
- ensure co-operation between the Service and the communities it serves in the combating of crime;
- reflect respect for victims of crime and an understanding of their needs; and
- ensure effective civilian supervision over the Service.

It is clear that the police are primarily responsible for combatting crime within the Republic and they have a clear legislative and Constitutional mandate.

The extent and nature of motor vehicle theft and motor vehicle robbery in the country resulted in a number of vehicle tracking companies operating in SA. A discussion on the most prominent vehicle tracking companies in SA follows, in order to contextualise their role in the combatting of vehicle crimes.

### **3.5.2 Vehicle Tracking Businesses in South Africa**

Section 199 of the South African Constitution Act 108 of 1996 (South Africa, 1996(a)) specifically deals with security services, which includes vehicle tracking companies as discussed in 2.3.6, in the Republic of SA. According to Section 199 of the Constitution, armed organisations or services may be established only in terms of national legislation. The security services must be structured and regulated by national legislation.

According to Minnaar (2004:15), with vehicle related crimes such as motor vehicle theft and motor vehicle robberies on the increase in SA during the 1990s, South Africa experienced a rapid growth as well as expansion of vehicle tracking companies such as Tracker. Minnaar (2004:15) further states that, as vehicle crime such as motor vehicle theft and motor vehicle robbery increased, vehicle tracking companies such as Tracker resorted to installing more state of the art vehicle tracking devices or systems into customers' motor vehicles in order to attempt to hinder potential robbers and thieves. Minnaar (2004:15) correctly notes that motor vehicle tracking and recovery companies such as Tracker have, in effect, freed the SAPS from actively addressing a large share of motor vehicle theft and robberies. However, this is only applicable to motor vehicle owners who can afford the installation of these vehicle tracking technology systems and the services that these tracking companies offer their clients. Although the SAPS established special anti-robbery units to patrol the major Gauteng route, the bulk of recoveries which involved the tracking, locating and recovery of robbed and stolen motor vehicles were undertaken by vehicle tracking companies such as Tracker. The insurance industry "encouraged owners to fit these tracking devices to their motor vehicles; for owners who do so, insurance companies reduced their client's monthly premiums accordingly" Minnaar (2004:15).

After interviewing incarcerated robbers, Zinn (2002:112) found that offenders who commit motor vehicle robberies are arrested in 3 ways:

- general crime prevention,
- satellite tracking equipment and
- detective work.

These findings emphasise the significance of vehicle tracking companies, and the technology used to track locate and recover stolen and robbed motor vehicles. Zinn (2002:64) indicates, however, that only 30% of arrests are due to detective work, while 70% of the arrests made are due to crime prevention, satellite tracking, and traffic officer stops. Apart from Tracker, which is the leading vehicle tracking company in SA, the following tracking and recovery companies also play a role in combatting vehicle theft and vehicle robbery:

### **3.5.2.1 Altech Netsar**

*Altech Netstar* commonly referred to as “*Netstar*” believe that 21 years ago they established the vehicle tracking industry in South Africa, by utilising Radio Frequency (RF) technology, and are of the opinion that they were the first vehicle tracking company to develop and successfully utilise a vehicle tracking unit on a radio transmitter/receiver network.

*Netstar’s* technological developments have been on the cutting edge of world advancements; this proficiency is underscored by numerous Technology Top 100 awards, and the prestigious Minister’s Award for Overall Excellence in 2007 (*Netstar, 2015*).

*Netstar* cater for a wide range of customers through its product line-up. It’s nationally designed and manufactured systems range from basic SVR systems to advanced fleet management solutions, as well as vehicle asset tracking devices with GPS/GPRS functionality (*Netstar, 2015*). According to *Netstar* (2015), the company has over 600,000 motor vehicles under its protection. The company employs over 800 people and provides a comprehensive private recovery service and infrastructure in Southern Africa. In excess of 60,000 stolen and robbed motor vehicles have been recovered to date.

*Netstar* has offices based Midrand, Durban, Cape Town, Port Elizabeth, East London, George, Pietermaritzburg, Rustenburg, Richards Bay, Newcastle, Witbank, Bloemfontein, Polokwane and Nelspruit. The company’s operations extend into

Africa: Botswana, Ghana, Mozambique, Namibia, Swaziland and Zambia, as well as global operations in Malaysia (*Netstar*, 2015).

### **3.5.2.2 Matrix vehicle tracking**

According to *Matrix* (2015) the company was founded in 1996 and has its roots as a “consumer-facing brand focused on personal safety and consumer telematics through superior vehicle tracking products and services”.

*Matrix* pioneers personal safety and convenience through technological expertise and has, to date, become a brand that is about so much more than just vehicle tracking. *Matrix* is at the forefront of technological innovation in the vehicle tracking industry and has developed a number of value-added vehicle tracking services such as “Crash Alert, Roadside Assistance, Early Warning, Tax Logbooks, Service Notification, Matrix IQ, Smartphone tracking as well as iPhone and iPad Applications”. *Matrix* is known to offer one of the most technologically advanced SVR services in the vehicle tracking industry and is the first to introduce the combined use of RF and GSM technology in vehicle tracking devices. *Matrix* believes that no tracking device should have less than a combination of RF and GSM technologies and this is how *Matrix* maintains its brand reputation (*Matrix*, 2015).

### **3.5.2.3 Ctrack vehicle tracking**

According to *Ctrack* (2015), the company was founded in SA in 1985 and in December 1998 the company listed on the Johannesburg Stock Exchange, JSE Limited under the “electronics and electrical” sector.

The *Ctrack* brand span six continents, with over 1,000 employees and more than 800,000 systems sold. *Ctrack* have concluded a number of successful global acquisitions in recent years, and expanded the company’s strong international reach into new emerging markets, such as Asia, Africa and Latin America. (*Ctrack*, 2015).

*Ctrack* offers specialist fleet management and vehicle tracking for a global client base. With more than 28 years of experience, *Ctrack* is recognised as a world-leading provider of advanced machine-to-machine communication and telematics solutions (*Ctrack*, 2015).

#### **3.5.2.4 Cartrack vehicle tracking**

According to Cartrack (2015), the company was founded in SA in 2001 and started its operations in 2004.

*Cartrack* quickly developed into a leading provider of Fleet Management, SVR and Insurance Telematics, with 400 000 clients worldwide. *Cartrack's* systems are built on the most advanced technologies available, coupled with devotion to client services. Initially, *Cartrack* focused on SVR services, which led to the *Cartrack* system being developed and implemented for the Sub-Saharan African market where vehicle theft was, and remains, amongst the highest in the world. To demonstrate confidence in its systems, *Cartrack* currently offers a cash back recovery warranty to its customers in the event of non-recovery of their stolen motor vehicles . Whilst its principal operations are situated in SA, *Cartrack* has embarked on an expansion drive into the rest of Africa, Europe and Asia (*Cartrack*, 2015).

From the above overview of prominent vehicle tracking companies, it is evident that all these vehicle tracking companies in SA play a significant support function for the SAPS in combatting vehicle theft and vehicle robbery. All these companies are, however, privately owned and operated security companies (see 2.3.6) and render a security service attached to a monthly premium. Although a large number of vehicle owners can afford to ascertain the services of these companies, the majority of vehicle owners do not acquire these companies' services. The researcher is of the opinion that vehicle owners should be increasingly encouraged to acquire the services of these companies in order to facilitate the recovery of motor vehicles in the event of theft and robbery.

#### **3.5.3 South African Insurance Crime Bureau**

According to the (SAICB, 2014(a)), on 31 October 2008 the crime bureau became operational with a vision to address all kinds of crime, such as vehicle theft and robbery that was prevalent within the short term insurance industry. Since inception, the SAICB has established itself n as a valuable tool in the fight against insurance crime , and also brought various agencies (SAPS, Insurance companies, vehicle tracking companies and the banking sector) working in synergy against commercial crime for the benefit of all.

The SAICB is mandated to address all forms of crime that is seen within the short term insurance industry, the SAICB also investigates repeat offenders who are responsible for submitting false or fraudulent motor vehicle claims to different insurance companies. The SAICB states the following: “Our aim is not to replace the internal fraud investigation units of the insurance companies, but to specifically look at fraud and crime being committed across the industry and affecting multiple companies, i.e. syndicated crime and fraud” (SAICB,2014(a)).

### **Mission of the SAICB**

- supply industry related intelligence,
- encourage alliance within the industry,
- fight insurance crime
- educate the public about insurance crimes
- obtain criminal convictions in court

### **Purpose of the SAICB**

- Fight organised crime
- actively address crime in the short term insurance industry
- minimize financial effect of criminal syndicates

Tracker works in conjunction with the SAICB and is involved in numerous projects to assist and educate the industry and other agencies within the security cluster on vehicle tracking technology. Short term insurance companies mandate the SAICB to act on their behalf in reporting and investigating vehicle crime. The SAICB is, therefore, an important role player in the fight against vehicle related crimes in SA.

### **3.5.4 International Association of Auto Theft Investigators**

The International Association of Auto Theft Investigators (IAATI) was formed in 1952, and the aim of the IAATI was to improve communication between motor vehicle theft investigators. The IAATI is currently represented in 35 countries with a membership count of 3604 members; these current members are representatives of law enforcement agencies and

many private organisations, who have a direct interest in motor vehicle theft and robbery prevention and investigation. The IAATI recognises that motor vehicle theft and robbery investigation requires the active involvement of both government as well as the private sector. Therefore, the IAATI membership database includes the insurance industry, motor vehicle manufacturers, motor vehicle rental companies, banks or other financial institutions that finance motor vehicle purchase as well as different vehicle tracking companies. The IAATI is of the opinion that membership co-operation is the most effective weapon to successfully combat motor vehicle crimes such as theft and robbery. IAATI is constantly providing its members with training and sharing expertise in areas such as motor vehicle investigation, technical developments, specific crime trends as well as sharing intelligence and information with regards to motor vehicle theft and robbery. (*International Association of Auto Theft Investigators*, 2015).

According to Steenkamp (1999:3), due to the international communication of IAATI members around the globe in the 1980s, the SAPS saw the necessity of becoming a member of IAATI. Steenkamp (1999:3) states that the main focus of the SAPS having joined forces with IAATI is to keep “abreast of new criminal techniques and trends and to exchange ideas with members as well as to have a better understanding of the phenomenon” of motor vehicle theft and robbery. Odendal (2015), the first Vice President of the IAATI Southern African Branch, emphasised that “IAATI is dedicated to developing and encouraging the highest professional standards of conduct among auto theft investigators, and strives to eliminate all factors interfering with the administration of the auto theft suppression effort”.

The researcher is an active member of the IAATI Southern African Branch. A national as well as an international training seminar is hosted annually by IAATI. From the researcher’s experience, the annual national training seminar is well attended by various stakeholders, such as the SAPS, SAICB, other vehicle tracking companies, insurance companies and private investigators in order to gain a better understanding of vehicle crime and how these role players can join forces to collectively combat vehicle related crime in SA.

A discussion on the role of the National Prosecuting Authority (NPA) as well as its constitutional mandate follows.

### **3.5.5 National Prosecuting Authority**

Schönteich (2014:1) explains that the NPA immediately in 1998 after its inauguration had to deal with the soaring levels of all serious and violent crime types such as vehicle robbery. As stated in section 2.2.1, Section 179 of South Africa's 1996 Constitution provides for a single prosecuting authority. According to Section 179 (2) of the Constitution, "the prosecuting authority has the power to institute criminal proceedings on behalf of the state and to carry out any necessary functions incidental to instituting criminal proceedings".

Schönteich (2014:6) further states that the goal of the NPA was to make the justice system more

- responsive to community concerns,
- accountable and democratic, and
- focused to the underlying drivers of crime.

Schönteich (2014:6-7) stresses that, by 1998, rising violent crime such as robbery was rapidly spreading to nearly all communities, and South African citizens condemned the criminal justice system as inefficient. In response, the South African government embraced a more aggressive approach to fighting crime, through enhancing visible policing, stricter laws pertaining to bail, as well as harsher prison sentences of criminal offenders, this aggressive approach by the South African government resulted in a significant increase in arrests, and police investigations were referred to criminal court for state prosecutor's decision.

According to the NPA Annual Report for 2013/2014 (South Africa, 2014(a):102), an actual conviction rate on vehicle robberies for 2012/2013 was recorded as 1 273 cases, with a conviction rate of 83.4%. This Annual Report further indicates a slight increase in the conviction rate on vehicle robberies for 2013/2014, which amounted to 1 597 cases recorded, with a conviction rate of 84.1%. However, the researcher is of the opinion that the conviction rate of vehicle robbery could have been higher if the dedicated robbery courts, as discussed in 3.2.3, were still operational. These dedicated robbery courts were implemented in Johannesburg in March 1999 with a team of dedicated "anti-hijack" criminal court prosecutors and SAPS detectives based at the Johannesburg Magistrate's Court. However,

these dedicated “anti-hijacking” courts have subsequently been terminated. The advantages of these courts included:

- Assistance with time management in the investigations of these cases;
- Closer co-operation and understanding of what is demanded by dealing with the same prosecutors allowed the investigating officer and prosecutor to meet to discuss aspects of a case;
- Successful opposition of bail applications;
- Personalised attention to witnesses and victims;
- Enhanced case flow through the court system;
- Improved time management in the gathering of evidence – the prosecutor directed investigating officers specifically in regards to the needs to defend a case successfully;
- Proper consultation with victims prior to the trial, and trauma counselling;
- Dedicated prosecutors continuously handled particular dockets at each court appearance.

The researcher is of the opinion that close cooperation and partnership between the police, insurance companies, SAICB, the national prosecuting authority, IAATI and the various vehicle tracking companies could promote the:

- recovery of motor vehicles using vehicle tracking technology,
- arrest of suspects after recovery,
- prosecution and conviction of suspects,
- return of motor vehicles to their lawful owners,
- confidence of communities in the criminal justice system,
- monetary savings of insurance companies, and
- economic growth.

The following section provides a brief overview of the LoJack vehicle tracking technology that is utilised and applied by Tracker.

### **3.6 AN OVERVIEW OF VEHICLE TRACKING TECHNOLOGY WITH SPECIFIC REFERENCE TO LOJACK**

Tracker was born from a very successful technology driven platform which started in the USA, called LoJack (*Tracker*, 2015(c)). According to an empirical study conducted by Levitt and Ayres (1998:48), “LoJack was first introduced in Boston Massachusetts in 1986; it was subsequently introduced to South Florida in 1988 and to three additional markets in 1990. As of December 1994, LoJack served 12 markets”. Levitt and Ayers. (1998:50-53) found that the presence of LoJack is associated with an “extreme decline in overall vehicle theft. For example, Boston experienced a 50% decline in auto theft rates since the introduction of LoJack; Newark's rate fell by 35%, and that of Los Angeles/Long Beach by almost 20%”. Gonzalez-Navarro (2008:3) confirms the findings of the empirical study conducted by Levitt and Ayres (1998), by stating that the application of LoJack vehicle tracking and recovery technology ensures “extremely high recovery rates” of stolen and robbed motor vehicles.

Furthermore, Levitt and Ayres (1998:45-48) found in their empirical study that “one vehicle theft is eliminated annually for every three LoJack vehicle tracking units installed in central cities, and the arrest rate for stolen motor vehicles fitted with LoJack stolen vehicle recovery technology is three times greater than it is for cars without vehicle tracking technology”. This study also found that LoJack vehicle tracking technology disturbs the functioning of chop-shops, where stolen and robbed motor vehicles are stripped for parts such as engines, gearboxes, mag wheels, panels such as doors as well as interior vehicle parts such as seats and dashboards, for resale on the black market. It was found that LoJack vehicle tracking technology successfully led to the closing of 53 chop shops in the city of Los Angeles.

According to Terp (in Stauffer & Bonfanti, 2006:505), the rapid acceleration of vehicle tracking technology has provided law enforcement agencies such as the police with the ability to track, locate and recover stolen or robbed motor vehicles. This statement is supported by Weber (2009:217) who indicates that vehicle tracking devices or systems such as LoJack are an effective method of quickly, effectively and accurately tracking, locating and recovering stolen or robbed motor vehicles and successfully re uniting the motor vehicles with their lawful owners. These devices are commonly referred to as ‘after theft systems’. Terp (in Stauffer & Bonfanti, 2006:505) further mentions that vehicle tracking devices or systems such as LoJack enable law enforcement agencies such as the police to track down,

locate and recover stolen and robbed motor vehicles immediately or within a relatively short period after the theft or the robbery. The main reasons for utilising vehicle tracking technology, according to these authors, is to recover a stolen or robbed motor vehicle as soon as possible, and reunite the vehicle with its lawful owner. The researcher agrees with these authors and is of the opinion that the focus of vehicle tracking technology is to:

- recover the stolen vehicle as quickly as possible after activating the tracking device,
- arrest the perpetrators responsible for the crime,
- gather as much intelligence as possible about the theft techniques (modus operandi) used,
- return the vehicle to its lawful owner, and
- assist the police in the criminal justice process.

According to *LoJack* (2015(a)), vehicle tracking and recovery technology was introduced to the world, by hiding a “small transmitter” or vehicle tracking unit in a motor vehicle. The researcher is of the view that this remarkable technology, which was invented by LoJack, also led to the establishment of Tracker in South Africa in 1996 (see 3.6.1).

The application of LoJack vehicle tracking technology in the South African context follows for discussion.

### **3.6.1 The application of LoJack vehicle tracking technology in South Africa**

Vehicle tracking technology has been active in South Africa for well over 19 years. Tracker South Africa was established in 1996, as one of the foremost vehicle tracking companies in South Africa. One of Tracker’s established partners, LoJack, who invented mainstream motor vehicle tracking in the USA in 1986, has since been responsible for hundreds of thousands of stolen and robbed motor vehicle recoveries across the globe including Africa, Asia, Europe, Latin America and the USA. Being associated with such an incredible brand as LoJack is what propelled Tracker to success in its early days (*Tracker*, 2015(c)).

Tracker merged with MobileData in 2007, which allowed Tracker to introduce the Skytrax range of GPS/GSM products to the South African market. This merger also gave rise to Tracker becoming the sophisticated technology driven company that it is today, offering the

best in personal vehicle tracking and comprehensive fleet management to customers throughout Southern Africa. Tracker's stolen vehicle recovery technology is currently being used in 30 countries worldwide, including the UK, France, Russia, Italy, Columbia, Brazil, Mexico and Argentina (*Tracker, 2015(c)*).

Furthermore, Tracker is the only vehicle tracking company in SA that benefits from a strong partnership with the SAPS. Tracker's affiliation with the SAPS allows it to offer the public the peace of mind they deserve when driving the streets, and it allows Tracker to effectively combat motor vehicle theft and robbery. Tracker's technology is currently installed in excess of 850,000 motor vehicles throughout South Africa, which allows Tracker to help ensure the safety of those motor vehicles and their drivers (*Tracker, 2015(c)*).

The Operational Response Services Department of Tracker was established in 1997 and mandated to assist the SAPS in the tracking and recovery of stolen and robbed motor vehicles fitted with Tracker vehicle tracking technology. Currently, in excess of 900 Vehicle Tracking Units (VTU) are utilised operationally by the SAPS in its motor vehicles. All points of entry (border posts) neighbouring SA are equipped with Tracker vehicle tracking technology and all SAPS aircraft including fixed wing aircraft and helicopters. As previously stated by Minnaar (2004:15), in 3.5.2, South African insurance companies have also been very active in encouraging their clients to have vehicle tracking devices installed into their motor vehicles and clients who have vehicle tracking technology fitted to their motor vehicles pay a reduced monthly instalment on their insurance premiums.

### **3.6.2 The Mandate of Tracker**

Only a formal contract entered into between a client and Tracker can mandate the company to activate, track and recover a stolen or hijacked vehicle. However, such a contract is not possible if a vehicle is not fitted with Tracker's vehicle tracking technology

*Tracker Terms of Use* (2015(a)) stipulates the formal service agreement that mandates Tracker to track and recover a client's vehicle. The conditions of this agreement are as follows:

Section B of the agreement stipulates:

- (1) Who the agreement is between (parties). The parties to the agreement are:

- a) Tracker, referred to as 'we', 'us' and 'our' in this document;
- b) the customer named on the application, referred to as 'you' and 'your' in this document;

(2) When the agreement starts.

The agreement starts when Tracker installs a unit in the vehicle. By allowing the unit to be installed in the vehicle, the client agrees to the terms and conditions. The client must not allow the unit to be installed in the vehicle if he/she does not agree to the terms and conditions. If the unit is already installed in the vehicle when the vehicle is bought, the agreement starts as soon as Tracker receives the application form from the client, or someone acting on the client's behalf, or when the client makes a telephonic application.

(3) When the agreement ends

The application shows whether the client chose a month-to-month agreement or a 36-month agreement.

3.1 The month-to-month agreement. If you have a month-to-month agreement, the agreement continues indefinitely until either you or we end the agreement.

3.2 The 36-month agreement. If you have a 36-month agreement, the agreement continues for 36 months. At the end of the 36 months, the agreement will continue indefinitely until either you or we end it by giving one calendar month's written notice.

Section D of the agreement stipulates the contracted services, as outlined below.

(1) Tracker will provide the following services:

- a) The services of Tracker that you chose in your application and that you pay for;
- b) Information and services on the Tracker website ([www.Tracker.co.za](http://www.Tracker.co.za)) and any Tracker mobile applications.

(2) You must use the services for valid and legal reasons only. The client must use the services for valid and legal reasons only. An example of a reason that is not valid is activating the unit for theft or robbery when there is no genuine theft or robbery. You

accept that neither we nor our suppliers or affiliates are legally responsible to you if you use the services for invalid or illegal reasons.

From the above service agreement, Tracker has a specific mandate to execute, as provided by the client. This mandate becomes effective as soon as the agreement is concluded and the tracking unit is placed in the vehicle.

A discussion on the partnership between Tracker and the SAPS, pertaining to the tracking and recovery of stolen and robbed motor vehicles , follows for discussion.

### **3.7 THE FORMAL PARTNERSHIP BETWEEN THE SOUTH AFRICAN POLICE SERVICE AND TRACKER**

As previously mentioned, the Constitution, as mentioned in 2.2.1, and the advancements in technology, as mentioned in 3.1, have paved the way for partnerships within the crime combatting cluster. One such unique partnership is the formal agreement between the SAPS and Tracker. These two forces joined hands in 1996 and made inroads into vehicle related crime.

The following section deals with the formal partnership agreement, and operational aspects and practical procedures thereof, between the SAPS and Tracker with regard to combatting vehicle crime as well as the policies and procedures within the partnership.

#### **3.7.1 Memorandum of Understanding entered into between Tracker and the South African Police Service**

According to section 13.1 of the Memorandum of Understanding (MOU) (South Africa, 2015(a)) entered into between the SAPS and Tracker, duly signed in terms of BID 19/1/9/1/114 TR (13), the renewal of this MOU has been approved for the period 2015-2020.

The MOU states:

- Whereas Tracker Connect (Pty) Ltd (“Tracker”) is licensed by LoJack International Corporation to use and sub-license the LoJack system (“the system”) which includes

the relevant software and software programs which can be utilised by way of sophisticated equipment (including the Vehicle Tracking Units) (“the equipment”) for purposes of the location, tracking and recovery of misappropriated motor vehicles ; and

- The SAPS recognise the value of the system and can utilise the equipment in the execution of its duties, the PARTIES agree as follows:

Section 5.1 of the MOU states that:

The SAPS undertakes to use the equipment supplied by Tracker in the execution of their duties and will ensure that the equipment is so used and deployed to obtain maximum coverage and effectiveness in the recovery of misappropriated motor vehicles .

Sections 5.5, 5.6 and 5.7 of the MOU further stipulate the following:

- Training in the use of the Tracker equipment will be provided by Tracker free of charge at such times and places as the SAPS may from time to time reasonably determine.
- Tracker, its personnel or its agents shall at all times assist the SAPS in all criminal cases and investigations that may result from the use of the system. When required, the SAPS shall in this regard, when assistance is required for the successful investigation as far as it may be necessary, assist Tracker to achieve the required results.

The operational aspects to comply with the MOU are determined by the agreed upon Standing Operating Procedure (SOP) (South Africa, 2015(b)) document between Tracker and the SAPS, which is subjected to amendment from time to time, as necessary, by both parties.

### **3.7.2 Standard Operating Procedure**

It is stated in section 1 of the SOP that such SOP supplements the MOU between the two parties and serves to address the operational aspects and practical procedures by which the objectives of the MOU are to be achieved.

Section 4 of the SOP states:

- 4.1.1 The technician/installer must physically inspect the vehicle and record the VIN. All Tracker installers/technicians must receive basic vehicle identification training.
- 4.1.2 Particulars of the vehicle such as make, model, year of registration, license number, engine number, colour, etc., as well as the full name and surname, identity number, residential address and telephone number, office address and telephone number of the client must be entered on the computer system of Tracker. The initials, surname and identity number of the installer, as well as the date, time and place of installation must also be recorded on the Tracker computer system.
- 4.1.3 The National Vehicle Information Control Centre (NaVICC) must authorise all activations. Tracking Units (TUs) will only be activated immediately in confirmed cases of theft or robbery of the vehicle. For any other crime (or reason like missing person cases), a case docket or a SAPS enquiry must be registered before activation can take place.
- 4.1.4 Tracker must maintain a single National Emergency Call Center (NECC) which is to be manned around the clock every day of the year. This centre is to accommodate:
- 4.1.5 The Toll-free line for clients (0800 13 23 23), solely for the purpose of communicating with Tracker, regarding the theft/robbery or the possible activation of their vehicle;
- 4.1.6 The facility to record all incoming/outgoing telephone conversations (only calls to/from the NECC);
- 4.1.7 A direct telephone and electronic communication between NECC and NaVICC;
- 4.1.8 A toll-free number (0800 111 056), exclusively for communication between SAPS and Tracker.

According to the SOP, it is of vital importance that the details of the stolen/robbed vehicle be circulated on the CSV without delay. Liaison between NECC and NaVICC concerning the correctness of the case, complainant, vehicle and circulation details are to be verified by means of the toll free number 0800 111 056 or through electronic communication. The SOP further mentions that, without exception, all reply codes detected by VTU-fitted motor vehicles must immediately be reported to the NECC or NaVICC. SAPS members will be trained on how to use the Tracker system. Training will be carried out by the applicable officials and/or Tracker Operational Services.

### **3.7.3 Tracker / SAPS Operational Structure**

Section 4.4 of the SOP deals with the SAPS/Tracker operational structure.

- 4.4.1 An Operational Liaison Structure between Tracker and the SAPS at National and Provincial level must be maintained. SAPS officers/members on national and provincial level should be assigned an additional responsibility to act as Tracker / SAPS Liaison Officers.
- 4.4.2 The objective of the Operational Liaison Structure is to ensure that the Tracker System is optimally utilised.
- 4.4.3 Regular meetings between Tracker and the SAPS must be held to discuss the above as well as operations, crime trends, etc.
- 4.4.4 The Tracker and SAPS Liaison Officers must ensure that the MOU and SOPs are complied with.
- 4.4.5 The Operational Liaison Structure must ensure that a proper and structured communication channel exists between Tracker and the SAPS, at National and Provincial levels.
- 4.4.6 The optimal deployment and transfer of VTUs will be jointly agreed upon by Tracker and the SAPS within the scope of the Operational Procedure. A detailed record of the VTUs deployed will be maintained by Tracker in cooperation with the SAPS.

The SAPS/Tracker MOU as well as the SOP and the operational structure clearly define the mandate, responsibilities and objectives of both the SAPS and Tracker in terms of this agreement, with a focus on the recovery of stolen and hijacked motor vehicles. It is of utmost importance that as soon as a SAPS vehicle receives a signal, indicating that a vehicle has been stolen or robbed, that the signal should be tracked immediately. This will ensure the best chance of recovery of the vehicle as well as the possibility of arresting the perpetrators.

An overview of the impact of LoJack vehicle tracking technology in the international arena follows, for discussion.

### **3.8 INTERNATIONAL PERSPECTIVES ON STOLEN VEHICLE TRACKING TECHNOLOGY**

It is estimated, by LoJack (2015 (b)), that globally a staggering 7.1 million motor vehicles are stolen or robbed annually, and the loss of these vehicle thefts and robberies is calculated to be approximately \$47 billion. It is believed that LoJack (2015) is the leading provider in the world of wireless tracking and recovery systems for motor vehicles and a global leader in stolen motor vehicle recovery. LoJack (2015) is of the view that they pioneered the stolen vehicle recovery market more than 25 years ago and has since earned a 90+% recovery success rate on cars, trucks and SUVs in the USA. Globally, hundreds of thousands of stolen as well as robbed motor vehicles have been recovered using LoJack vehicle tracking technology. LoJack has built a global business through a network of international licensees and company-owned businesses; as a result, the LoJack global footprint spans over 30 countries throughout North America, South America, Europe and Africa (*LoJack*, 2015(b)). The global impact of LoJack in the vehicle tracking and technology environment is acknowledged by Levitt and Ayers. (1998), Gonzalez-Navarro (2008) and Tebaldi (2013).

According to Tebaldi (2013:8), vehicle thieves and robbers are smarter, more skilled and receive support from criminal syndicates operating from all corners stones of the globe. INTERPOL (2014) agrees and states that vehicle crime is a highly organised criminal activity which negatively affects all areas of the world and which has strong relationships to organised crime. Motor vehicles are not only stolen for the “criminals” own sake, but are also stolen to finance other crimes. Motor vehicles can also be used as “bomb carriers” or in the commissioning of other crimes (see 3.3). This statement by INTERPOL is confirmed by Adger (2007:20) who states that stolen and robbed motor vehicles are internationally

problematic and the possibility of successfully recovering and repatriating an exported stolen or robbed motor vehicle is near impossible without cooperation between INTERPOL member countries. Roebuck (2012(b):172) is of the view that stolen or robbed motor vehicle recovery using vehicle tracking technology is an intertwined part of the so-called “layered approach” to vehicle safeguarding and vehicle tracking and recovery technology systems are extremely effective and efficient in assisting the police to track, locate and recover stolen and robbed motor vehicles. Vollaard and Van Ours (2010:2) refer to Levitt and Ayers. (1998:43) who state that “LoJack” securely install a vehicle tracking unit (TU) in a motor vehicle to ensure that tracking, locating and recovering the stolen and robbed motor vehicle, by the police, are more effective.

INTERPOL (2014) also reports a steady escalation in the use of the INTERPOL “Stolen Motor Vehicle (SMV) database by INTERPOL member countries, both in terms of adding stolen and robbed motor vehicles to the existing database or enquiring about a stolen or robbed motor vehicle on the INTERPOL database”. *Tracker United Kingdom (UK) (2015)* states that the mind-set of people who believe they will not become a victim of vehicle theft remains an issue across the globe. From Canada to the USA, as well as countries in the Euro Zone, vehicle crime such as theft and robberies is rampant across a range of cities and states. Consequently, it remains of utmost importance that motor vehicle owners remain cautious when it comes to safeguarding their motor vehicles. At the end of December 2014, INTERPOL member countries recorded a staggering total of 6.8 million reported stolen and robbed motor vehicles.

### **3.8.1 United States of America**

LoJack (2015(b)) refers to a Federal Bureau of Investigation (FBI) 2013/2014 report that in the USA alone, it is estimated that there were a total number of 699,594 thefts of motor vehicles in 2013. This report further substantiates the significance of motor vehicle theft by stating that; every 45.1 seconds a one motor vehicle is stolen in the USA, thus resulting in a staggering \$4.1 billion that was loss nationwide to motor vehicle thefts and robberies in 2013.

The FBI 2013/2014 report further indicates that most motor vehicle thieves and robbers are part of well organised motor vehicle crime syndicates and know exactly how to misappropriate any motor vehicle they want (see 3.8). According to Roberts (2012:447), LoJack vehicle tracking technology is the most widely utilised motor vehicle tracking system

by American police departments. According to Tebaldi (2013:6), as stated at the INTERPOL global conference on vehicle crime, the USA had:

- 14,000+ U.S. local as well as state police motor vehicles , and aircraft equipped with LoJack tracking devices;
- 1,800+ agencies; and
- American law enforcement agencies utilises as a preferred supplier LoJack for stolen vehicle recovery technology. The New York State Police: Information Resources Management Plan (1993:7) indicated that New York City Police motor vehicles will utilise LoJack technology with the aim of tracking, locating and recovering stolen and robbed motor vehicles .

### **3.8.2 South America**

According to *Landairsea (2014) GPS tracking news: Brazil impacts market makes GPS vehicle tracking systems mandatory*, Brazil is geared to become one of the biggest markets for vehicle tracking devices. This report states that every new motor vehicle sold in Brazil is required by law to be equipped with a global positioning (GPS) vehicle tracking system. Both Brazil as well as other international manufacturers of global positioning enabled vehicle systems as well as fleet tracking technology companies will directly benefit from the new law.

*Landairsea (2014) GPS tracking news: Brazil impacts market makes GPS vehicle tracking systems mandatory* further states that an estimated growth of \$1.5 billion growth for 2010 is to increase to almost \$3 billion by 2014. Currently, many of the Latin American vehicle tracking companies relies on countries such as Asia, Europe, South Africa, and the USA to manufacture software as well as hardware. These international technology suppliers as mentioned will continue to play an essential role as Brazil realises its investment in vehicle tracking technology.

### **3.8.3 European Union**

According to *Statistics explained (2014)*, across the European Union (EU) a gradual decline of motor vehicle theft and robberies was experienced in recent years, partly as a result of technical developments in vehicle theft preventions. EU numbers of motor vehicle theft

related offences decreased by 37% between 2007 and 2012, and notably motor vehicle theft halving (53%) in England, Scotland as well as Wales. Alarming, however Greece recorded a staggering increase in motor vehicle theft of 38% between 2007 and 2012.

According to Beckfor-Thed (2014), newly manufactured motor vehicles sold in the EU has to be fitted with a "black box", also referred to as a vehicle tracking unit. The European Commission has ruled that, by October 2015, all types of new motor vehicles sold across the EU must be fitted with a "black box" also known as a vehicle tracking unit.

Tebaldi (2013:6) states that, in Europe, LoJack VTUs are fitted to:

- About 2,500 UK police vehicles
- About 1,500 French Gendarmerie
- 500+ Guardia Civil in Spain
- Italy has 350+ police vehicles and multiple fixed sites at police stations
- Other European countries with similar coverage.

### **3.8.4 Africa**

As stated in 3.4.1, Tracker currently has 900 VTUs that are utilised operationally by the SAPS. All ports of entry / border posts neighbouring SA are equipped with Tracker vehicle tracking technology, as are all SAPS aircraft and Ports of Entry. According to *Tracker (2015(b))*, aside from the fact that their vehicle tracking systems are well-renowned throughout Africa, Tracker has the most exceptional operational and technical teams working in the fight against crime. Other factors for Tracker's success include the following:

- Tracker is one of the leading vehicle tracking companies in Africa
- Tracker is dedicated to offering safety and security to our customers using our precise GPS tracking technology
- Tracker is dedicated to saving you money

- Tracker invented the mainstream stolen vehicle recovery industry
- Tracker is the largest vehicle tracking company in Africa
- Tracker has access to the best vehicle operating and recovery practices
- Tracker has an established track record with insurers
- Tracker is approved by many motor manufacturers
- Tracker has a unique partnership with the SAPS that allows it to recover motor vehicles quicker
- There are many benefits to using Tracker to ensure safety and security. *(Tracker 2015:(b))*

Tracker conducts business in the following African countries: Angola, Botswana, Malawi Mozambique, Zambia, Swaziland, and Zambia.

### **3.9 CONCLUSION**

Vehicle tracking technology has its roots in the USA, as it was started by LoJack. Subsequently, due to the high crime rate in SA and the extent of theft of motor vehicles and vehicle robbery, the natural progression was to utilise vehicle tracking technology to address these crimes. The ultimate goal of utilising this technology was to assist in the fast recovery of stolen motor vehicles as well as to minimise the loss to owners, insurance companies and the economy.

Tracker vehicle tracking technology is tried and trusted and the technology adds value to both government and the private sector as a means of recovering stolen and robbed motor vehicles. Tracker shares a unique partnership with the SAPS that can be seen as a “win win” situation in the fight against vehicle crime. It is also clear that insurance companies advocate for the use of vehicle tracking devices in motor vehicles. The application of LoJack vehicle tracking technology in Europe, America, South America and South Africa signifies the importance of partnerships with law enforcement. Partnerships are extremely necessary to win the battle against vehicle crime, as is state of the art vehicle tracking technology such as Tracker. The

utilisation of vehicle tracking technology greatly enhances the recovery of stolen or robbed motor vehicles .

**4.1 INTRODUCTION**

This chapter presents analyses and integrates the qualitative data gained from semi-structured individual interviews (as discussed in 1.13 of Chapter 1) for presentation and discussion. This is done by means of developing themes and subcategories, to label certain patterns or trends that can be identified or isolated, in order to indicate the realisation of the goal and objectives of this study, as previously mentioned in paragraph 1.4 of Chapter 1. Primarily, and to realise these goals, fifteen semi-structured, one-on-one interviews were conducted with operational members performing duties at the SAPS: West Rand Flying Squad.

In order to promote the trustworthiness of the study, the research methodology, as discussed in paragraph 1.14 of Chapter 1, was implemented and adhered to in the gathering and analysis of the data. During the process of data collection (i.e. the semi-structured interviews), as discussed in 1.12 of Chapter 1, the questions reflected in Annexure A, were used as a guideline to structure the discussion with the members. From the respondents' answers to the aforementioned questions, and the resultant processes of data analysis by the researcher, the main themes, discussed below, emerged.

Ethical considerations as per 1.15 of Chapter 1 were adhered to and taken into account before, during and after the semi structured interviews.

The results of the individual interviews follow for discussion.

**4.2 THE RESULTS FROM THE INTERVIEWS**

In this section, the results of the semi-structured interviews, as discussed in section 1.12, are presented according to themes and sub-themes which indicate the respondents' perceptions, feelings and experiences of the value of vehicle tracking technology in the recovery of stolen and robbed motor vehicles. The questions posed to the respondents are outlined below; this is

followed by the researcher's reflection on the interviewees' responses to the questions, which are quoted verbatim in the discussion.

#### **4.2.1 Exploring respondents' views on the value of the formal agreement between Tracker and the SAPS in the tracking and recovering of stolen and robbed motor vehicles**

The answers to the following question gave rise to this theme: *"In your opinion has the formal agreement between Tracker and the SAPS added value to the tracking and recovering of stolen and robbed motor vehicles ?"* The purpose of this question was to determine if, and to what extent, respondents view the formal agreement between Tracker and the SAPS as valuable to the recovery of stolen and robbed motor vehicles .

After analysis of the answers provided by the respondents to the above question, it was apparent that all the respondents viewed the formal agreement between Tracker and the SAPS as a valuable agreement in the recovering of sought motor vehicles. All fifteen respondents who were interviewed were of the opinion that the SAPS/Tracker agreement is an important agreement in the fight against vehicle related crime, such as motor vehicle theft and robbery, and that the agreement is a favourable one.

Eight respondents were of the opinion that the SAPS/Tracker agreement assists in the recovery of stolen or robbed motor vehicles and further assists in the apprehension of these criminals. The respondents responded as follows:

*["It's very important. It helps us [SAPS] to have a bigger success rate in recovering [motor vehicles ] and apprehending suspects. It adds a lot of value to our work."]*

*["It makes the whole process easier to the effect of recovering stolen motor vehicles ."]*

*["I can describe it as a very easy way for the police to recover stolen or hijacked [ robbed] motor vehicles "]*

*["In my opinion, this agreement, it helps a lot in recovering the motor vehicles and it is more difficult if you just looking for the car, the stolen car, without the Tracker, you will never know where to go"]*

Five respondents were of the opinion that the SAPS/Tracker formal agreement can be seen as a partnership to recover stolen and robbed motor vehicles, and they believe that this partnership is a valuable partnership. Some of their responses include:

*[“Tracker and SAPS shares a partnership to recover stolen and hijacked vehicle.”]*

*[“From the beginning of the starting of Tracker firstly it was difficult, then Tracker came and put aeriels on and the job got much easier and especially with hijacked motor vehicles , stolen motor vehicles .”]*

One participant was of the view that the formal agreement adds value in the sense that the technology provided to the SAPS by Tracker ensures an increased recovery rate together with the apprehension and detention of suspects.

*[“There will be a lot less recoveries if we do not have these devices, a lot less.”]. [“If it wasn’t for tracking [Tracker] then the recovering of [stolen and robbed motor vehicles ] would be much more difficult than previously years that we didn’t use Tracker.”]*

Another participant was aware that vehicle tracking technology was supplied by Tracker to the SAPS but did not comprehend what, exactly, the formal agreement between Tracker and the SAPS entails.

*[“...It’s signed by the Commissioner, so it means it’s there on top by the big guys [commissioner]...].*

*[“... Because even these guys [commissioner], we go with them [vehicle tracking units on the police cars] to the provincial office...the national office but no one ever said, no, take this thing out...”]*

It is significant to note that all the respondents are of the opinion that this formal Tracker/SAPS agreement adds significant value to their daily tasks, especially in recovering stolen and robbed vehicle. The responses from the respondents further suggest that the formal agreement between the SAPS and Tracker has resulted in an increase in their ability to recover stolen and robbed motor vehicles and to put them in a favourable position to apprehend vehicle thieves and robbers. This suggests that the partnership is a successful and well established one amongst all SAPS members, not only police management or a select few individuals, and that all SAPS operational members see the benefit of the agreement.

From the interviews, it thus became evident that all the respondents became highly dependent on vehicle tracking technology to assist them in recovering sought motor vehicles ; this task

was, prior to the SAPS/Tracker agreement, reliant on chance and almost impossible. Consequently, the SAPS will find it increasingly challenging to retrieve stolen or robbed motor vehicles without a formal agreement such as the SAPS/Tracker agreement. The partnership entered into between Tracker and the SAPS greatly empowers SAPS members with the necessary technology and ability to make an impact on vehicle crimes.

#### **4.2.2 Exploring respondents' experiences of the effectiveness of vehicle tracking technology to track and locate stolen and robbed motor vehicles**

The answers to the following question gave rise to this theme: *“From your experience, is the use of vehicle tracking technology an effective method to track and locate stolen and robbed motor vehicles ?”* The purpose of this question was to determine respondents' views on the effectiveness of the use of vehicle tracking technology as a method to track and locate stolen and robbed motor vehicles .

After analysis of the answers provided by the respondents to the above question, it was apparent that all the respondents viewed the use of vehicle tracking technology as an effective method to track and locate stolen and robbed motor vehicles.

Six respondents were of the opinion that the use of vehicle tracking technology is an effective method to track and locate stolen and robbed motor vehicles, since this technology assists to indicate the exact whereabouts of such motor vehicle to SAPS members. It was furthermore expressed that the effectiveness of this technology renders it indispensable to the tracking and locating of stolen and robbed motor vehicles .

*[“I think you cannot work without it [technology]. Its new technology, as I said, the criminals, everything, they [are] much cleverer than the old previous day. They [the criminals] are working with technology. So we must fight technology with technology.”]*

*[“ Most of the time when the vehicle is not fitted with a tracking device or with this kind of technology it is not easy for owners to get back their motor vehicles and, at the end of the day, they lose their belongings or their motor vehicles for ever or for good.”]*

*[“With the units, the devices that we have in our motor vehicles , it is much easier to track these [stolen and robbed] motor vehicles because you can track them from very far. So you*

*don't have to be close to the vehicle. It basically guides you to the stolen or hijacked vehicle.”]*

*[“[Prior to introducing vehicle tracking technology in SAPS motor vehicles ] You got a lookout [for a stolen/robbed vehicle] and from the lookout you basically had to look for this vehicle [without vehicle tracking technology] and the chances that you would get it [vehicle] is very slim. These motor vehicles ... if you take the whole of Gauteng, how big Gauteng is, it's like a needle in a haystack.”]*

*[“To locate the stolen motor vehicle without the Tracker it's like we are working in the darkness.”]*

Five respondents described vehicle tracking technology as a very accurate method to track and recover stolen or robbed motor vehicles .

*[“This technology is very accurate to pinpoint motor vehicles , to locate them easily without any struggle.”]*

*[“Where the eye can't see this technology will show you exactly or pinpoint to you where the vehicle is so it can be recovered.”]*

Four respondents experienced that the vehicle tracking technology is extremely effective and this makes their job of tracing and locating stolen motor vehicles much easier.

*[“From the time that the vehicle is stolen till the time that it has been recovered is much quicker... Previous times before we had this technology a vehicle could have been stolen today and you could only recover it maybe months, even years later.”]*

It is significant to note that all the respondents are of the opinion that the use of vehicle tracking technology is a very effective and accurate method of recovering stolen and robbed motor vehicles. This suggests that the respondents feel that technology, such as Tracker vehicle tracking technology, is and accurate, effective, efficient and a swift way to recover a stolen/robbed vehicle.

From the interviews, it became clear that it is in fact not easy to recover a stolen or a robbed motor vehicle without vehicle tracking technology and an organisation such as the SAPS has become highly dependent on vehicle tracking technology to recover stolen/robbed motor

vehicle. Furthermore, the respondents confirmed, based on their experience, that a stolen/robbed vehicle may never be recovered if not fitted with technology.

Moreover, the effectiveness of vehicle tracking technology became evident through its capability of tracking hidden motor vehicles , such as motor vehicles hidden in a garage, behind high walls or even in a basement parking. This technology still allows the respondents to recover these motor vehicles in secluded areas, which was not possible prior to the fitting of vehicle tracking technology to SAPS motor vehicles . All the respondents confirmed that there was no effective method to recover stolen or robbed motor vehicles prior to vehicle tracking technology.

#### **4.2.3 Determining the value respondents attach to training received in the use of vehicle tracking technology**

The answers to the following question gave rise to this theme: *“What value does training in the use of vehicle tracking technology add to your operational duties?”* The purpose of this question was to determine the value that respondents ascribe to training received in the use of vehicle tracking technology.

After analysis of the answers provided by the respondents to the above question, it was apparent that all fifteen respondents are convinced that training in the use of vehicle tracking technology is extremely important to effectively execute their operational duties, with specific reference to the tracking and recovery of stolen/robbed motor vehicles .

*[“Training is of utmost importance.”]*

*[“It [training] assists you to use the technology in the correct way so that you can get the robbed motor vehicles and stolen motor vehicles . It helps you to fight crime more effectively.”]*

*[“The way that we’ve been trained to use this technology is perfect. It made us as a whole it makes you a better policeman because you have this equipment, knowing how to use it effectively just makes you such a much more operational strong policeman.”]*

*[“They must be trained because a lot of the people they don’t understand precisely how the system work and what’s the real meaning of and why we’ve got it.”]*

*[“Training is first of all a very important part of what we do. It teaches you exactly how a specific thing or something works.”]*

It was also established that all 15 respondents received on-the-job training in the use of the vehicle tracking technology.

*[“With this training that Tracker have provided us on the job it assist me and enables me a lot better to recover stolen motor vehicle .”]*

From the interviews, it became evident that respondents are dependent on vehicle tracking technology training to assist them in recovering sought motor vehicles. It is also noted that the police will not be able to retrieve stolen/robbed motor vehicles without receiving training in the use of vehicle tracking technology. All the respondents received on-the-job training in the application of this technology and the use of the equipment; they were of the opinion that it is the preferred method to be trained when dealing with vehicle tracking technology as the training intervention is of a practical nature, thus providing them with exposure to real-life scenarios.

The following sub-theme resulted from this theme:

#### **4.2.3.1 Exploring respondents’ views on SAPS units to use vehicle tracking technology to recover stolen and robbed motor vehicles**

The answers to the question gave rise to the following sub-category: *“Which units in the SAPS should be trained in the application of vehicle tracking technology?”* The purpose of this question was to determine which units in the SAPS should be trained in the use of vehicle tracking technology.

After analysis of the answers provided by the respondents to the above question, it was apparent that all the respondents are convinced that training in the use of vehicle tracking technology should be restricted to specialised units, as discussed in par 1.11, namely, the Flying Squad, the K9 Unit as well as Tactical Response Teams.

*[“My opinion that would be only specialised units maybe like K9, Tactical Response Teams and Flying Squad in the different areas.”]*

*[“Specialised units they work on priority cases like robberies, stolen motor vehicles and those kind of things.”]*

*[“Especially units like Flying Squad, Dog Unit, those guys. I think it’s more efficient for them to utilise the tracking itself.”]*

*[“So in short I would suggest that the Flying Squad, the dog units, the Air Wing, people that doesn’t have station boundaries would be more effective... would be a more effective tool in this regard.”]*

*[“The most important people that must have it are specialised units like K9, Flying Squad, Tactical Response [Team], units like that.”]*

It is significant that all the respondents believe that only specialised units, such as the Flying Squad, Tactical Response Teams, Air Wing and K9 Units, should be trained and equipped with vehicle tracking technology as their mandate is to deal with priority crimes such as robberies and the theft of motor vehicles .

It also became clear that these specialised units, as discussed in 1.11 of Chapter 1, are not limited to a certain station area with set boundaries. This is of utmost importance when a stolen or robbed vehicle has been tracked in order for the SAPS vehicle to move around freely to locate the sought vehicle.

#### **4.2.4 Exploring respondents’ views on the SAPS’s ability to effectively combat vehicle theft and robbery in isolation**

The answers to the following question gave rise to this theme: *“In your opinion, can the SAPS effectively combat vehicle theft and robbery on their own?”*

The purpose of this question was to explore respondents’ views on the SAPS’s ability to effectively combat vehicle theft and robbery on their own. After analysis of the answers provided by the respondents to the above question, it was apparent that 14 respondents were of the opinion that the SAPS could not effectively reduce vehicle crime such as theft and robbery on their own. All the respondents, with the exception of one, acknowledged that without the use of vehicle tracking technology the SAPS would find it very challenging to combat vehicle theft and robbery on their own, as experienced prior to the utilisation of this technology.

*["No, definitely they [SAPS] cannot that's why they ... that's why they joined forces with the private sector like Tracker to assist them in reducing crime, which is working."]*

*["It is not easy for the SAPS to reduce theft of motor vehicles or hijackings [robberies]."]*

*["We struggled before. Without Tracker, like I said, we struggled before... without technology we won't manage."]*

Only one participant believed that the SAPS could effectively reduce vehicle crime on their own without the assistance of other role-players.

*["Ja, it is possible. It's possible like I've been talking about the we have visible policing in the locations and towns from the police station."]*

It is also significant to highlight that all the respondents agreed that a combination of technology and partnerships is necessary to reduce vehicle related crime, such as robbery and theft. All the respondents valued the physical resources, in the form of vehicle tracking technology, and the skills development, in the form of training interventions on the effective application of this technology, which resulted from the partnership with Tracker.

*["No, they can never do it. Worldwide it's about partnership. So the partnership that the police with Tracker have it is assisting the police enormously and it helps to fight better."]*

*["If we can't join forces with the private sector like Tracker to assist us in the type of equipment and training that they give us we will never be able to reduce this [vehicle] crime."]*

The following sub-themes resulted from this theme:

#### **4.2.4.1 Exploring respondents' experiences of the effectiveness of the police in combating vehicle crime prior to the introduction of Tracker vehicle tracking technology**

The answers to the following question gave rise to this subtheme: *"From your experience, how effective were the SAPS in combating vehicle theft and robbery prior to the implementation of Tracker vehicle tracking technology?"* The purpose of this question was to explore the respondents' experiences of the effectiveness of the police in combating vehicle theft and robbery prior to the introduction of vehicle tracking technology, in comparison to their experiences after the introduction of such technology.

An analysis of the answers provided by the respondents, to the above question, reveals that it was unanimously reported that the SAPS could not effectively reduce vehicle crime, such as theft and robbery, prior to the introduction of vehicle tracking technology.

*["I don't think...not so good. As I said, its luck. If you get a vehicle back it's actually luck."]*

*["Unfortunately I have to say we were not that effective for a simple reason there was no method."]*

*["Not very effective."]*

*["Not very effective at all. There was no method that could scare criminals not to steal cars."]*

*["The police wasn't as effective as today. I would refer to this process as a manual process whereby you had to be at the right place at the right time to get the people with the stolen vehicle."]*

*["I can say it was very much less effective. Not much motor vehicles was recovered by the police."]*

Significantly, all the respondents were of the opinion that, prior to the introduction of vehicle tracking and recovery technology, the police were ineffective in locating and recovering stolen and robbed motor vehicles. A number of respondents experienced that it was only by fortune if a stolen or robbed vehicle was located and recovered prior to introducing vehicle tracking and recovery technology in SAPS motor vehicles .

#### **4.2.4.2 Exploring respondents' views on vehicle crime reduction as a result of vehicle tracking technology**

The answers to the following question gave rise to the subcategory: *"From your experience, does Tracker vehicle tracking technology contribute to a reduction in vehicle theft and robbery?"*

The purpose of this question was to determine respondents' experiences of the preventative role that vehicle tracking technology plays in vehicle theft and robbery.

After analysis of the answers provided by the respondents to the above question, it was evident that 14 respondents held the view that the vehicle tracking technology contributed to a reduction in vehicle crime, such as theft and robberies. Only 1 participant, interestingly, felt that vehicle tracking technology did not reduce vehicle crime, but indicated that the technology only led to an increase in the recovery of stolen motor vehicles. A number of respondents were of the belief that this technology instils a fear of being caught amongst vehicle thieves, and that this gives rise to uncertainty in potential vehicle thieves and robbers as to whether they should continue in these criminal deeds, thus resulting in a reduction of vehicle crimes.

*[“I cannot say there was a reduction of vehicle theft and hijackings. I’d rather say there was a massive vehicle recovery by the police. Technology contributed to a high or a massive vehicle recovery.”]*

*[“It did reduce crime in a big way. because now if they want to hijack or steal a vehicle they’re first gonna see if this vehicle has got a Tracker or a unit in and they will think twice before they take it.”]*

*[“Because of criminal fearing that they might get caught while stealing the car it has an effect to reduce theft and hijackings”]*

*[“I’ve also said earlier on criminals fear that they might be caught whilst stealing the motor vehicles. Tracker technology has definitely, definitely reduced theft and hijackings [robberies].”]*

#### **4.2.5 Determining respondents’ views on the role of vehicle tracking technology in arresting vehicle thieves and robbers**

The answers to the following question gave rise to this theme: *“From your experience, does the use of Tracker vehicle tracking technology lead to increased arrests of vehicle thieves and robbers?”* The purpose of this question was to determine whether vehicle tracking technology leads to an increase in the arrest rate of vehicle thieves and robbers.

After analysis of the answers provided by the respondents to the above question, it was apparent that all the respondents are convinced that vehicle tracking technology leads to an increase in the arrests of vehicle thieves and robbers. Some respondents emphasised the

ability of vehicle tracking technology that enables SAPS members to respond timeously to an activated tracking device, which greatly enhances their chances of arresting the suspects.

*[“The faster they activate the tracking device the faster we can start looking for the vehicle and recover it and very often with success to an arrest.”]*

*[“Obviously the ideal is to find the vehicle it’s still moving with the suspects still in and we do so with the help of Tracker and therefore we find suspects still in the vehicle and we can arrest them.”]*

*[“You can even arrest the suspect before they can reach their destination where they are going.”]*

*[“We will get them inside the car because of the Tracker.”]*

*[“The device has improved the ratio of arrests tremendously. So definitely much more arrest than prior.”]*

It is significant to note that all the respondents believe and are confident that the use of vehicle tracking technology greatly assists them in affecting more arrests. These responses suggest that vehicle tracking technology is a successful and preferred way to arrest criminals involved in vehicle theft. Consequently, the result of the use of vehicle tracking technology is that the SAPS does not have to rely solely on fortune to effect an arrest related to vehicle theft.

#### **4.2.6 Determining respondents’ opinions of the role that vehicle tracking technology plays in tracking and locating stolen and robbed motor vehicles**

The answers to the following question gave rise to this theme: *“What role does vehicle tracking technology play in the tracking and locating of stolen and robbed motor vehicles ?”*

The purpose of this question was to determine the respondents’ perceptions of the role of the application of vehicle tracking technology as a method to track and locate stolen and robbed motor vehicles .

After an analysis of the answers provided by the respondents to the above question, it was apparent that all the respondents viewed the use of vehicle tracking technology as an effective method to track and locate stolen and robbed motor vehicles.

Eight respondents were of the opinion that the role that vehicle tracking technology plays is the accuracy that the technology provides in recovering a stolen and/or robbed motor vehicle. Four respondents thought that vehicle tracking technology makes it easy for them to track and locate a stolen or robbed vehicle. One respondent believed that the most important role of technology, in tracking and locating a stolen or robbed motor vehicle, is the fact that the technology keeps them safe as the respondent believes that the information received from technology keeps the members abreast of the vehicle's movement. In addition, one respondent believed that the role that vehicle tracking technology plays in tracking and recovering stolen or robbed motor vehicles is that it is time-saving and a cost effective method to track and locate sought motor vehicles. Another respondent believed that technology's role is to eliminate the 'hit-and-miss' effect, in other words, to successfully locate and recover a stolen or robbed vehicle.

*["The technology is very accurate and it gives you exact location of the motor vehicles ."]*

*["The technology is very accurate it can pin point the exact location of where the motor vehicles is."]*

*["Without the use of this kind of technology it will not having easy for the police or anyone to locate where the vehicle is."]*

*["It helps more, more productive, less petrol being spent. It helps a lot. It's a big role, big importance."]*

*["It is time and cost effective."]*

It is significant to note that all the respondents believe that technology plays an integral part in the process of tracking and locating stolen or robbed motor vehicles. This suggests that the respondents trust the technology to assist them to locate the motor vehicles in a faster, safer and more efficient way.

From the interviews, however, it became clear that the majority of the respondents believed that technology is accurate, way to pinpoint and locate a stolen or robbed vehicle. Furthermore, this technology enables the respondents to track and locate stolen and robbed motor vehicles with ease.

#### **4.2.7 Determining respondents' views on vehicle tracking technology as an enhancement of their capabilities of recovering stolen and robbed motor vehicles**

The answers to the following question gave rise to this theme: *“From your experience, does the use of vehicle tracking technology enhance your capabilities to track and locate stolen and robbed motor vehicles ?”*

The purpose of this question was to determine whether vehicle tracking technology enhances the respondents' capabilities of recovering stolen and robbed motor vehicles .

After analysis of the answers provided by the respondents to the above question, it was apparent that all the respondents were of the opinion that vehicle tracking technology enhances their capabilities of tracking and locating stolen or robbed mot vehicles. Respondents provided various reasons as to why this technology enhances their capabilities. These reasons included consistency in tracking and locating stolen motor vehicles, increased arrest rates, and even locating and identifying 'chop shops'.

*[“Capable of locating stolen and hijacked motor vehicles on a regular basis.”]*

*[“I am capable of affecting much more arrests than what I could do before and I am capable of locating and recovering these motor vehicles regularly.”]*

*[“I would say your chances would be reduced dramatically if you don't have technology like this.”]*

*[“Your success is higher you will be able to do more, get bigger successes maybe to close down on a chop shop or where all the motor vehicles go to and now you can catch or get the vehicle back in that area and I would say it is effective.”]*

*[“It is a tool I can use to be a more effective police member and this is one of the tools that we use on a daily basis and that had definitely made a big impact in how effective I do my work.”]*

It is significant to note that the respondents believe that they are much more capable of tracking and locating stolen or robbed motor vehicles as a direct result of the utilisation of vehicle tracking and locating technology. This suggests that the technology that is used to track and locate stolen and robbed motor vehicles is a valuable tool to use in order to enhance the respondents' capabilities.

From the interviews, however, it became clear that prior to the application of vehicle tracking technology the respondents were not as capable of tracking and locating stolen and robbed motor vehicles as they are with the use of the technology.

#### **4.2.8 Determining respondents' views on the promptness of returning stolen and robbed motor vehicles fitted with tracking technology to their lawful owners**

The answers to the following question gave rise to this theme: *"In your opinion, does the use of vehicle tracking technology assist to speedily locate and return stolen/ robbed motor vehicles to their lawful owners?"*

The purpose of this question was to determine respondents' views as to whether vehicle tracking technology facilitates the speedy recovery and return of a sought vehicle to its lawful owner.

After analysis of the answers provided by the respondents to the above question, it was apparent that all the respondents were of the opinion that a vehicle is returned to its lawful owner more speedily due to the use of vehicle tracking technology. Seven respondents were of the opinion that it is possible to return a stolen or robbed vehicle to its lawful owner within 24 hours. Five respondents thought that it is possible to return the vehicle to its lawful owner within the same day that the crime was committed. Three respondents believed that a vehicle could be returned to its lawful owner within a couple of hours after it was stolen and recovered.

*["It is effective that a vehicle stolen in the morning can be recovered quickly and returned to the owner within the same day."]*

*[“For one, the tracking of the car is faster. You get the car faster. Now you immediately you know the client, the client is informed that the police got his car.”]*

*[“It is effective in that the stolen vehicle in the morning can be recovered, and quickly and even returned to the owner on the same day before the sun goes down.”]*

*[“It is a quicker process. You get the vehicle, there is no need to identify it, the Tracker has basically identified it already, and the thing is not just that. When we recover it quicker it gets back to the owner much quicker.”]*

It is significant to note that all the respondents were of the opinion that it is not possible to speedily return a stolen or robbed motor vehicle to its lawful owner without the use of vehicle tracking technology. This suggests that the use of vehicle tracking technology enables the SAPS to return stolen or robbed motor vehicles to its lawful owners promptly and, therefore, renders a more professional service to the community.

From the interviews, however, it also became clear that it may take weeks, months or even years to hand a vehicle back to its lawful owner should the vehicle not be equipped with vehicle tracking and recovery technology.

### **4.3 SUMMARY**

This chapter provided the presentation, analyses and integration of the qualitative data, that is, the semi-structured one-on-one interviews with members of the SAPS: West Rand Flying Squad who are responsible for the day-to-day operational duties which include the recovery of stolen and robbed motor vehicles, using vehicle tracking technology.

The respondents' views and opinions were presented by way of themes and sub-categories which explored the outcomes of the semi-structured interviews. Clarification of the themes and the sub-categories provided an explanation of the views and opinions of the respondents; this ensured that there is a clear understanding of the themes and sub-categories. Respondents were quoted verbatim in order to highlight their thoughts and opinions. A better grasp of how the respondents experienced the process of tracking and recovering stolen and robbed

motor vehicles emerged. Furthermore, how these respondents deal with the use of vehicle tracking technology became clear in this discussion.

Chapter 5 presents the interpretation of the findings.

**5.1 INTRODUCTION**

This chapter presents the interpretation of the qualitative data (semi-structured interviews with members attached to the PES, who perform duties at the SAPS: West Rand Flying Squad in Gauteng, as discussed in 1.6) and is illustrated by means of themes and sub-themes, as identified in Chapter 4. The identified themes specifically relate to the operational experiences of SAPS: PES members in the utilisation of vehicle tracking technology and the value that this technology holds in the tracking and recovery of stolen and robbed motor vehicles . As a result, the discussion and subsequent interpretation of each theme points to the accomplishment of addressing the research question, research aim, and research purpose (as discussed in 1.4, 1.5 and 1.7).

The purpose of this chapter is, therefore, to give meaning to the experiences of the participants by comparing such experiences to the literature presented in Chapter 2 and Chapter 3 of this study. Consequently, variances and parallels that may exist between the literature and the experiences of the participants will be illustrated, and the probable meaning of such variances and correlations will be explored.

**5.1.1 The value of the formal agreement between Tracker and the SAPS in the tracking and recovery of stolen and robbed motor vehicles**

Formal working agreements between public and private entities are of utmost importance in this modern era, which is characterised by limited resources and high demand for improved service delivery.

From the literature presented in Chapter 2, it is clear that current legislation within South Africa supports the formation of agreements or partnerships between public and private entities. The Constitution of the Republic of South Africa, Act 108 of 1996, as discussed in 2.2.1, provides for security companies to be established; however, they must operate within the national legal framework of the Constitution of the Republic.

The significance of entering into agreements or partnerships, especially in the context of crime prevention, is further accentuated in Chapter 3. As illustrated in 3.2, the former Minister of Police, Nathi Mthethwa (2013), reiterated that the SAPS cannot successfully achieve the goal of crime reduction on its own. It is thus clear that assistance from other sectors, such as the private security industry and business sector, as well as the general public is extremely important in fighting crime in general. Moreover, the rationale of the SAPS/Tracker formal agreement is clarified in 3.7, which makes clear that the motivation behind the SAPS and Tracker joining forces in 1996 is to combat vehicle crime. The formal MOU and SOP, as discussed in 3.7.1 and 3.7.2, further strengthens the agreement between SAPS and Tracker, thus signifying the prominence given to this agreement. The MOU is clear and vocal in that the SAPS recognise the value of vehicle tracking technology and that the SAPS may utilise this equipment in the execution of its duties. In addition, Ron Knott-Craig (Tracker, 2014), as outlined in 3.2.1, highlights the value of the agreement between SAPS and Tracker by illustrating statistics related to the successes achieved as a direct result of this formal agreement. Literature contained in 3.8 provides evidence that there is a slim to near impossible chance of recovering stolen motor vehicles without co-operation. The value of formal agreements is further illustrated in 3.8.1 where it is evident that co-operation or formal agreements between international police organisations and private vehicle tracking businesses result in immense successes. It is thus evident, from this literature, that it is an international trend to form agreements and to share resources and knowledge to recover stolen and robbed motor vehicles .

From the perceptions of the participants, which are presented in Chapter 4, it became evident that the majority of the participants believed that an agreement such as the one between Tracker and SAPS is a significant in that it assists in leading to the recovery of stolen and robbed motor vehicles , as well as the effecting of arrests.

It strongly emerged that the majority of the participants were of the opinion that the formal agreement between SAPS/Tracker is very valuable. Participants valued the formal agreement particularly because it resulted in their enhanced ability, provided by the vehicle tracking technology, to track, locate and recover stolen or robbed motor vehicles. This, consequently, results in ensuring a higher success rate with regard to the amount of arrests affected due to the utilisation of the technology. *“It’s very important. It helps us [SAPS] to have a bigger success rate in recovering [motor vehicles ] and apprehending suspects. It adds a lot of value to our work.”*

Participants also placed emphasis on the fact that the formal SAPS/Tracker agreement pertaining to vehicle tracking technology assists members to achieve an increase in the recovery of stolen or robbed motor vehicles. *“There will be a lot less recoveries if we do not have these device, a lot less.”* Furthermore, the participants drew attention to the positive effect on the execution of their operational duties that was brought about through this agreement, specifically related to the tracking and locating of motor vehicles . *“From the beginning of the starting of Tracker firstly it was difficult, then Tracker came and put aerials on and the job got much easier and especially with robbed motor vehicle , stolen motor vehicles .”* One participant was aware that the technology was provided by a private entity [Tracker] to the SAPS, however, this participant did not exactly know what the agreement entails.

The formal agreement between SAPS/Tracker is essentially a particularly significant agreement that should be nurtured and cherished as the agreement places the SAPS in a position to fight vehicle crime more efficiently and effectively. Similar agreements between government and the private sector should be established among other sectors, especially in fighting crime with the use of technology.

The formal agreement between SAPS/Tracker is clearly the start of a long and prosperous path that can assist the SA economy and improve the professional image of the police, through improved service delivery. It could also be advantageous to other relevant role players such as the banking and insurance industries. The value of this formal agreement is further reflected in the awareness and understanding of this agreement among SAPS members operating at the grassroots level.

### **5.1.2 The effectiveness of vehicle tracking technology**

To ensure the success of any system, it is imperative for such a system to be effective.

The review of the literature on the nature and extent of vehicle crimes in South Africa, with particular reference to vehicle theft and vehicle robbery, as presented in Chapter 3, signifies the effectiveness of vehicle tracking technology. Weber (2009:217), in 3.2.1, illustrates that the effectiveness of vehicle tracking systems lies in their swift and accurate ability to track, locate and recover stolen and robbed motor vehicles. In addition, Terp (in Stauffer &

Bonfanti, 2006:505), in 3.6, recognises that vehicle tracking technology has provided law enforcement agencies such as the police with a successful method to successfully track locate and recover stolen and robbed motor vehicles. Terp (in Stauffer & Bonfanti, 2006:505) further emphasises the ability of vehicle tracking technology to locate a stolen or robbed motor vehicle instantaneously or within hours after the theft or robbery. Section 5.1 of the MOU entered into between the SAPS and Tracker, as per 3.7.1, places high value on the utilisation of vehicle tracking technology to achieve maximum effectiveness in the recovery of misappropriated motor vehicles .

From the participants' experiences, as presented in Chapter 4, it became known that all the participants experience and perceive the use of vehicle tracking technology as a very effective method to recover stolen and robbed motor vehicles. Participants further illustrated the effectiveness of vehicle tracking technology by placing high value on the accuracy and swiftness of vehicle tracking technology in recovering a stolen vehicle. *“This technology is very accurate to pinpoint motor vehicles , to locate them easily without any struggle.” “To locate the stolen motor vehicle without the Tracker it’s like we are working in the darkness.”*

No other effective method, other than vehicle tracking technology, exists to effectively track, locate and subsequently recover a stolen or robbed motor vehicle within such a short period of time and with such accuracy. It has also become clear, from the responses provided by the majority of the participants, that a vehicle might not be recovered if not fitted with technology. The effectiveness of this type of technology was further acknowledged by participants who illustrated the capability of this technology to ascertain the whereabouts of a stolen or robbed vehicle even in secluded areas. *“Where the eye can’t see this technology will show you exactly or pinpoint to you where the vehicle is so it can be recovered.”*

Vehicle tracking technology is a valuable resource that is quick, accurate, and leads to an increase in the possibility of locating stolen and robbed motor vehicles. Without this technology, locating and recovering a misappropriated vehicle will be virtually impossible. One can thus conclude that vehicle tracking technology is effective in the recovery of stolen or robbed motor vehicles.

### 5.2.3 The significance of training in the application of vehicle tracking technology

For vehicle tracking technology to be successful, it is of utmost importance that those who utilise this technology receive appropriate training in the application thereof. One of the core skills that the police is dependent on during the tracking and recovery of a stolen or robbed motor vehicle is the efficient application of the technology. As a result, training interventions to sufficiently skill police members are imperative since training forms an integral part of understanding the operation of this technology.

The literature review on the nature and extent of vehicle crimes in South Africa, with particular reference to vehicle theft and vehicle robbery, as presented in Chapter 3, highlights the importance of efficient training in the application of vehicle tracking technology. From the literature review, as presented in Chapter 3 (3.7.1), it is evident that the SAPS/Tracker MOU places significant emphasis on the regular training of SAPS members on the application of Tracker vehicle tracking technology. The MOU stipulates the following: “Training in the use of Tracker equipment will be provided by Tracker free of charge, at such times and places as the SAPS may from time to time reasonably determine”.

The MOU clearly acknowledges that continuous training should be supplied by Tracker. The value of the training provided by Tracker, in terms of the participants’ operational performance, is illustrated by the participants’ views as discussed in Chapter 4: *“The way that we’ve been trained to use this technology is perfect. It made us as a whole it makes you a better policeman because you have this equipment, knowing how to use it effectively just makes you such a much more operational strong policeman.”*

Police emergency motor vehicles, such as the flying squad, move around more frequently, have fewer jurisdiction restrictions and are used as a “force multiplier.” All the participants, as outlined in Chapter 4, are of the opinion that not all units should be trained in using vehicle tracking technology: *“...only specialised units maybe like K9 Tactical Response Teams and Flying Squad in the different areas”* *“Specialised units...work on priority cases like hijackings, stolen motor vehicles .”*

Tebaldi, as noted in Chapter 3 (3.8.1), makes reference to the French Gendarmerie, which is a specialized French police unit that is also equipped with vehicle tracking technology. The

researcher is thus inclined to agree and promote the fact that specialised units, such as the PES within the SAPS should be equipped with Tracker vehicle tracking technology in their motor vehicles, as is the case with international specialised police divisions, such as the French Gendarmerie.

The participants unanimously stressed the importance of training in the utilisation of vehicle tracking technology, and acknowledge the fact that, to be able to utilise such technology, training is a requirement: *“Training is of utmost importance.”*

#### **5.2.4 Effectiveness of reducing crime by the SAPS**

Before a specific system, such as vehicle tracking technology, is implemented into a large organisation, such as the SAPS, the question should be asked: How effective is the organisation without the use of vehicle tracking technology to recover stolen or robbed motor vehicles, and what value will such technology add to the SAPS?

From the interviews conducted, as illustrated in Chapter 4, the majority of the participants were of the opinion that the SAPS cannot effectively reduce vehicle crimes alone. *“...That’s why they [SAPS] joined forces with the private sector like Tracker to assist them in reducing crime which is working.”* *“It is not easy for the SAPS to reduce theft of motor vehicles or hijacking.”* Participants further placed high value on the use of vehicle tracking technology to enhance their effectiveness in addressing vehicle crimes: *“without technology we won’t manage.”* *“No they can never do it.”*

It is also significant to note that all the participants were of the opinion that a combination of vehicle tracking technology and partnerships is necessary to reduce vehicle related crime such as robbery and theft.

Significantly, all the participants believe that, prior to the utilisation of vehicle tracking and recovery technology, the SAPS was not effective in recovering stolen and robbed motor vehicles. They considered the recovery of such motor vehicles to be a fluke: *“Its luck. If you get a vehicle back it’s actually luck.”* It further became evident that participants became reliant on vehicle tracking technology to assist them to trace and recover stolen and robbed motor vehicles whereas, prior to the utilisation of vehicle tracking technology, it seemed that good fortune played a crucial role in the recovery of stolen motor vehicles.

During the interviews, all the participants also highlighted that they believe it is nearly impossible to effectively reduce vehicle crime without the use of vehicle tracking technology: *“Unfortunately I have to say we were not that effective for a simple reason there was no method.” “Not very effective.” “Not very effective at all. There was no method that could scare criminals not to steal cars.”*

The literature discussed in Chapter 3 (3.6) confirms the effectiveness of vehicle tracking technology. Levitt and Ayres (1998:50-53) confirm that the presence of LoJack vehicle tracking technology is associated with a sharp fall in overall motor vehicle theft in central cities in the USA. In addition, the literature outlined in Chapter 3 (3.2), by Africa Check in conjunction with the Institute for Security Studies (ISS) Crime Hub (*Factsheet: South Africa’s official crime statistics 2013/2014*, 2014) and the 2013/2014 SAPS National Crime Statistics, indicated that from a perspective of reducing crime SA has experienced two of the worst years in the last decade. Additionally, the literature, as per 3.2, illustrates that the SAPS found it increasingly challenging to address vehicle crimes on its own. Mthethwa (2013) stated the SAPS daily have to deal with extremely dangerous and violent criminals, and it was emphasised that crime in South Africa is violent in nature. These violent crimes, as mentioned by Mthethwa, include vehicle robbery. Mthethwa (2013) stated that the SAPS were not in a position to achieve the objective of reducing crime on its own. The Minister of Safety and Security, Nkosinathi Nhleko, agrees with Mthethwa (2013) in this regard. This confirms that vehicle theft and vehicle robbery and the subsequent recovery of such motor vehicles is a significant problem that poses immense challenges for the SAPS.

It is also made clear, by Statistics South Africa Statistical Release: Victims of Crime Survey (2012:21), that more than 35,3% of Gauteng households, 31,3% of households in the Western Cape, 10,4% of households in Limpopo and 13,8% of households in the Eastern Cape took physical protection measures to protect their motor vehicles. The literature, as per 3.2.2, even points to a concern raised by the United States Department of State: Bureau of Diplomatic Security (2014) indicate that the USA government remains concerned about crime in SA.

An overview of the literature, participants’ viewpoints, the police ministry and the general public makes it clear that the SAPS cannot effectively reduce vehicle related crime on its own. These notions are highlighted by the SAPS National Crime Statistics for the period

2013/2014 (South African Police Service, 2014) which illustrate that vehicle related crime, especially the robbery of motor vehicles, has increased and that there has been a very slight decrease in the theft of motor vehicles. The increase of vehicle crimes led to media reports such as:

- *3 Month old baby survives robbery ordeal* (Dipa, 2015:1);
- *Crime stats SA: 11000+ cars hi jacked* (*Wheels 24*, 2014);
- *SA's ticking time bomb of vehicle crime* (*News 24*, 2015(b)); and
- *Vehicle crime increasing* (*News 24*, 2015(a)).

Clearly due to the ineffectiveness of the SAPS in effectively reducing vehicle crime on its own, the general public was forced to take physical protection measures to protect one of their most valuable assets, their motor vehicles. The researcher is inclined to believe that one of the most effective protective measures for a vehicle is installing vehicle tracking technology. It is thus clear that the SAPS cannot effectively address vehicle crimes on its own. Assistance to the SAPS is given in the form of an official partnership between the SAPS and Tracker in order to combat vehicle crimes. Vehicle tracking technology is an effective tool in the tracking and recovery of stolen or robbed motor vehicles .

### **5.2.5 Effecting arrests**

Effecting the arrests of perpetrators who commit vehicle related crimes is an important factor in addressing vehicle crimes. By effecting arrests, criminals are actively removed from society and placed in the corrections system. Incarceration essentially means that there is no opportunity for the criminal, such as a vehicle thief or robber, to offend while in a corrections facility.

After interviewing the participants, as illustrated in Chapter 4, it became apparent that all the participants are unanimously convinced that vehicle tracking technology leads to an increase in arrests of vehicle thieves and robbers. *“Obviously the ideal is to find the vehicle while it’s still moving with the suspects still in and we do so with the help of Tracker and therefore we find suspects still in the vehicle and we can arrest them.” “You can even arrest the suspect before they can reach their destination where they are going.” “We will get them inside the car because of the Tracker.”*

The interviews further revealed that all the participants aim to recover a stolen or robbed vehicle as soon as possible and, consequently, effect arrests: *“The faster they [Tracker] activate the tracking device the faster we can start looking for the vehicle and recover it and very often with success to an arrest.”*

The literature, as reflected in Chapter 3, illustrates the significance of vehicle tracking technology in effecting the arrest of associated perpetrators. Ron Knott-Craig, operations director of Tracker, for example, confirms that the Tracker /SAPS partnership has successfully resulted in over 13 000 arrests of motor vehicle thieves and robbers and the recovery of 67 000 stolen and robbed motor vehicles (Tracker, 2014). In addition, De Klerk (2013:1) explains that a motor vehicle is used in the majority of crimes and that motor vehicles can be used for various reasons related to crimes, such as:

- Transporting or hiding a victim
- To get to the crime location
- As the get-away vehicle
- To transport stolen goods
- As the murder or suicide “weapon”.

As a result of the use of vehicle tracking technology, which fitted to motor vehicles , these offenders can be timeously tracked, located and arrested.

The researcher is cognisant of the fact that a recovered motor vehicle does not contribute to a reduction in vehicle crimes, such as theft and robbery. The arresting of perpetrators is extremely important, as the literature suggests in Chapter 3 (3.2.1). Linden and Chaturvedi (2005:256) believe that a large proportion of motor vehicle thefts and robberies are committed by repeat offenders. Linden and Chaturvedi. (2005: 256) is of the opinion that a “relatively small number of perpetrators are responsible for committing vehicle crimes and, therefore, account for a high percentage of vehicle thefts as well as vehicle robberies. This appears to be the case for not only the joyriders but also for the professional vehicle thieves. The researcher is of the opinion that arresting offenders who commit vehicle related crimes is the only way in which a “persistent” crime, such as motor vehicle theft and robbery, can be

curbed. Without successfully arresting offenders, it is believed by the researcher that motor vehicle crimes will increase annually.

Furthermore, the researcher points to the fact that the arrested individual offenders should be interviewed extensively, as soon as possible after arrest, to establish their modus operandi, as discussed in Chapter 3 (3.4). Du Plessis (in Van der Westhuizen, 1996:34) points to the importance of information relating to modus operandi and is of the opinion that this information is of cardinal importance in investigating and preventing motor vehicle related crimes. The researcher is inclined to believe that these individuals can further provide important information regarding motor vehicle related crimes by using the information drawn from them for criminal intelligence, in order to assist in further addressing motor vehicle crimes. After interviewing incarcerated robbers, Zinn (2002:112) found that one of the methods successfully employed to arrest suspects is “satellite tracking equipment” to track locate and recover stolen or robbed a motor vehicle.

From the above discussion, it can be deduced that vehicle tracking technology plays a crucial role in enabling the SAPS to successfully arrest perpetrators who commit vehicle theft and robbery.

#### **5.2.6 The role of vehicle tracking technology in the recovery of stolen motor vehicles**

During the interview process, as described in Chapter 4, the majority of the participants were of the opinion that the most significant role that vehicle tracking technology plays in support of their operational functions is the accuracy that the technology provides in tracking and recovering a stolen or robbed motor vehicle. *“The technology is very accurate and it gives you exact location of the vehicle.”* *“The technology is very accurate it can pinpoint the exact location of where the vehicles is.”*

Interestingly, one participant believed that the most important role of technology in tracking and recovering a stolen or robbed vehicle is the fact that the technology enhances the safety of SAPS members; this participant believes that information received from the technology keeps the members abreast of the stolen or robbed vehicle’s movements and they can, proactively, act accordingly. The viewpoint of this particular participant is due to the fact that technology is not only utilised by participants to track, locate and recover motor vehicles

and arrest suspects, but it also fulfils a secondary role, namely, to enhance the safety of SAPS members while dealing with armed vehicle thieves or robbers.

Another participant was of the opinion that the role that vehicle tracking technology plays in tracking and recovering stolen or robbed motor vehicles is the fact that it is a time saving and cost effective method to track and locate sought motor vehicles. *“It helps more, more productive, less petrol being spent. It helps a lot. It’s a big role, big importance.”* One participant believes that vehicle tracking technology’s role is to eliminate the “hit and miss” effect in attempting to locate and recover a stolen or robbed motor vehicle: *“Without the use of this kind of technology it will not having easy for the police or anyone to locate where the vehicle is.”*

The literature discussed in Chapter 2 (2.3.6) illustrates that Section 1 of the PSIRA Act 56 of 2001(South Africa, 2001) defines a satellite tracking device as security equipment. It is noted that vehicle tracking technology is an initiative that started with LoJack technology in America. The technology was subsequently purchased in South Africa, and used in partnership with law enforcement, to combat vehicle crime.

The literature study conducted in Chapter 3 (3.5.2) indicates that Section 199 of the South African Constitution, Act 108 of 1996 (South Africa, 1996(a)), specifically deals with security services, including vehicle tracking companies (as discussed in 2.3.6) in the Republic of SA. According to Section 199 of the Constitution, armed organisations or services may be established only in terms of national legislation. The security services must be structured and regulated by national legislation. Currently, vehicle tracking companies operate under a governing body i.e. PSIRA, as discussed in Chapter 2 (2.3.6).

The literature reviewed in Chapter 3 (3.5.2) further illustrates the role of vehicle tracking technology in the recovery of stolen motor vehicles. Minnaar (2004:15) notes that with the escalation of motor vehicle robbery in SA during the 1990s, and the high rate of motor vehicle theft, led to a growth of vehicle tracking companies. Minnaar (2004:15) notes that while the robbery of motor vehicles dramatically increased, vehicle tracking companies installed more and more vehicle tracking devices in to motor vehicles.

Additionally, Chapter 3 outlines that the main reason for utilising vehicle tracking technology is the recovery of a stolen motor vehicle, as soon as possible. The researcher is of the opinion that the focus of vehicle tracking technology is to:

- recover the stolen vehicle as quickly as possible after activating the tracking device,
- arrest perpetrators responsible for the crime,
- gather as much intelligence as possible about theft techniques (modus operandi) used,
- return the vehicle to the lawful owner, and
- assist police in the criminal justice process.

#### **5.2.7 Enhanced capabilities of SAPS members due to vehicle tracking technology**

During the interview process, as referred to in Chapter 4, it became clear that being capable of tracking, locating and recovering a stolen or robbed vehicle is of particular importance as all the interviewed participants were of the opinion that vehicle tracking technology enhances their ability to track and locate stolen or robbed motor vehicles. *“Capable of locating stolen and hijacked vehicles on a regular basis.” “I am capable of affecting much more arrests than what I could do before and I am capable of locating and recovering these motor vehicles regularly.”* This suggests that technology used to track and locate stolen and robbed motor vehicles is a valuable asset to use to enhance tracking and recovery capabilities.

When consulting the literature as contained in Chapter 3, it is evident in the MOU (2015), as per 3.7.1, that the SAPS recognises the value and abilities of vehicle tracking technology. In addition, Chapter 3 (3.7.3) specifically refers to the operational structure of the SAPS and Tracker, and states that optimal deployment of VTUs will be jointly agreed upon between the two parties.

The literature contained in Chapter 3 provides reasons as to why police organisations should acquire enhanced capabilities to address vehicle related crimes. Tebaldi (2013:8) is of the belief that thieves are smarter, more professional and supported by large international

criminal organizations. INTERPOL (2014) is of the opinion that vehicle crime affects the whole world. Adger (2007:20) agrees with INTERPOL, and is of the opinion that stolen and robbed motor vehicles are an international epidemic and the chances of recovering and repatriating an exported stolen or robbed vehicle are near impossible without cooperation. Roebuck (2012:172(b)) is of the view that vehicle tracking systems are very effective in helping the police to successfully recover stolen and robbed motor vehicles. Vollaard and Van Ours (2010:2) refer to Levitt and Ayres. (1998:43) who state that a hidden LoJack vehicle tracking unit in private motor vehicles could make the tracking, locating and recovery of stolen and robbed motor vehicles by the police more effective.

The abovementioned literature is supported by the participants' responses in the interviews, as presented in Chapter 4. The participants highlighted the positive impact of vehicle tracking technology in enhancing their capabilities of tracking and recovering stolen or robbed motor vehicles : *“It is a tool I can use to be a more effective police member and this is one of the tools that we use on a daily basis and that had definitely made a big impact in how effective I do my work.”*

From the above discussion, it is clear that a national and international confirmation that vehicle tracking technology assists the police to be more effective and capable of fighting vehicle related crime.

It is further confirmed that vehicle tracking technology adds value to the SAPS and enables its members to track, locate and recover a stolen or robbed vehicle as well as effect arrests. Vehicle tracking technology thus adds value to the ability of SAPS members to track and locate stolen or robbed motor vehicles; primarily, plays an extremely important role in successfully fighting vehicle related crime. The secondary effect is that this capability will lead to successful arrests in other crimes as it is known that criminals use motor vehicles that are stolen or robbed to commit other crimes.

### **5.2.8 Returning of a vehicle to its lawful owner**

After conducting the interviews, as discussed in Chapter 4, it became evident that the majority of the participants were of the opinion that it is possible to return a stolen or robbed

vehicle to its lawful owner within a short period of time. *“It is effective that a vehicle stolen in the morning can be recovered quickly and returned to the owner within the same day.” It is effective in that the stolen vehicle in the morning can be recovered, and quickly and even returned to the owner on the same day before the sun goes down.*” It also became evident that, without the use of technology, this was not the case prior to vehicle tracking technology since the subsequent recovery of a stolen or robbed vehicle, and the return thereof to its lawful owner could take weeks, months or years. In some cases, the vehicle might never be reunited with its lawful owner.

Chapter 2 (2.3.4) presented a literature review of the National Road Traffic Act 93 of 1996 (South Africa, 1996(b)) which clearly defines the word “owner” as: the person who has the right to the use and enjoyment of a vehicle in terms of the common law or a contractual agreement with the titleholder of such a vehicle.

Literature, as discussed in Chapter 3, further signifies the value of vehicle tracking technology in returning a motor vehicle to its lawful owner. Weber (2009:217) confirms, in 3.1, that vehicle tracking units are capable of effectively, quickly and accurately locating stolen and robbed motor vehicles, as well as reuniting a stolen or robbed motor vehicle and its lawful owner. From the researcher’s experience, vehicle tracking technology is currently the only system that is able to effectively locate a stolen or robbed motor vehicle, in a short period of time, and ensure that the vehicle is given back to its lawful owner.

### **5.3 SUMMARY**

This chapter interpreted the findings reached from the semi-structured interviews with operational members within the SAPS PES, whilst offering an overview of the literature consulted in Chapters 2 and 3 of this study. The findings were broken down into themes, as was identified in Chapter 4. The interview outcomes were summarised in this chapter, and the findings were subsequently drawn with reference to the views and opinions of the respondents, in comparison to the literature.

Chapter 6 will provide a summary of the dissertation from Chapter 1 to Chapter 5, after which the interpretations made in this chapter will be studied and relevant conclusions will be

drawn. Recommendations will also be made, based on the main findings of the study to stress the value of vehicle tracking technology in the recovery of stolen and robbed motor vehicles.

**6.1 INTRODUCTION**

This chapter provides a summary of the dissertation from Chapter 1 to Chapter 5, after which the interpretations made in Chapter 5 are studied and the relevant conclusions drawn. Subsequently, recommendations are made, based on the main findings derived from the themes presented in Chapter 4 to ascertain the value of vehicle tracking technology to recover stolen motor vehicles. Should the SAPS management, insurance companies and vehicle tracking industry commit themselves to the recommendations made in this chapter, incidents of vehicle theft and robbery could decrease, the recovery of sought motor vehicles could increase, more arrests could be effected, and general vehicle related crimes could decrease. This study is important, since the value of vehicle tracking technology to recover stolen and robbed motor vehicles is identified and explored.

**6.2 SUMMARY**

Chapter 1 opened with an introduction to the reason for undertaking the research, namely, to explore the value of vehicle tracking technology in recovering stolen motor vehicles. A detailed problem statement was provided, after which the purpose and importance of this research was explained. The value of this research was also discussed in this chapter. The chapter then presented the goal and objectives of the study, which provided the aim and reasons for the research, as well as a clear statement of the research objectives.

The purpose of this study was:

- To explore the value of vehicle tracking technology in the recovery of stolen motor vehicles ; and
- To ascertain how vehicle tracking technology will complement the recovery process of a stolen motor vehicle by utilising vehicle tracking technology.

The opinions of the operational members within the PES who perform duties at the SAPS: West Rand Flying Squad in Gauteng were explored and interpreted by the researcher. Semi-structured interviews with fifteen operational members of the SAPS: West Rand Flying Squad were conducted and the respondents' opinions were explored and described. Furthermore, the delimitation of the study addressed the narrowed scope of the research.

Key theoretical concepts pertaining to this study were defined in this chapter, in order to ensure mutual understanding of their meanings in the context of this study. The geographical demarcation of the study followed, for discussion. The research methodology was then outlined, through explanation of the exact steps that were taken to address the research problem. This methodological outline consisted of an overview of the explorative characteristics of the study, the research approach and design, methods of data collection and analysis, methods to ensure trustworthiness, and the ethical considerations of the study.

Chapter 2 presented a broad overview of current South African legislation and policy governing motor vehicle theft and motor vehicle robbery in South Africa. In addition, directives governing the utilisation of motor vehicle tracking technology in South Africa further augmented the legislative overview. The focus of this chapter was on specific legislation pertaining to property crime in South Africa, with specific reference to vehicle theft and vehicle robbery. An overview was also provided with regard to sentences that may be imposed on offenders found guilty of such offences. Furthermore, this chapter also referred to competent verdicts, in accordance to the prescriptions of the Criminal Procedure Act 51 of 1977 (South Africa, 1977), and the applicable procedures that should be followed when a person is arrested for committing vehicle theft or robbery.

Attention was also given to legislation pertaining to the National Road Traffic Act 93 of 1996 (South Africa, 1996(b)) and the Standards Act 29 of 1993 (South Africa, 1993(c)), with specific attention to motor vehicles. Moreover, an overview of the PSIRA Act 56 of 2001 (South Africa, 2001) was presented with specific reference to the application of vehicle tracking technology. The Electronic Communications Act 36 of 2005 (South Africa, 2005) was also examined with regard to the use of signal blocking devices (commonly known as "jammers") to influence, interfere with or block a legal (RF or GPS/GSM) signal.

Furthermore, this chapter examined the role of ICASA with regard to legislation pertinent to combatting vehicle crimes by using technology.

Chapter 3 provided a general literature review of existing publications relevant to the research problem. The viewpoints of a variety of authors, that relate specifically to the research, as related to the value of vehicle tracking technology in the recovery of stolen and robbed motor vehicles, were unpacked to place the current study within the appropriate conceptual and theoretical context, and to obtain a thorough understanding of the topic. A discussion regarding to the SAPS/Tracker partnership was also presented in this chapter. In addition, a summary and examples from the international community were presented to point out similarities regarding the use of vehicle tracking technology. These international studies emphasise the importance of such technology and engaging in partnerships or formal agreements to enhance the recovery of stolen or robbed motor vehicles. Emphasis was also placed on the importance of vehicle tracking technology to enable the SAPS to recover stolen and robbed motor vehicles. The chapter concluded with a presentation and discussion of various vehicle tracking companies operating within South Africa.

Chapter 4 aimed to conceptualise the opinions of the respondents and to obtain an understanding of the data gathered from the interviews. Patterns and trends were identified by means of themes and subcategories that emerged from the interview process. The collected data were described and illustrated by means of interviews with fifteen operational members from the PES, performing duties at the SAPS: West Rand Flying Squad. Questions relevant to the value of vehicle tracking technology to recover stolen and robbed motor vehicles were asked. The qualitative approach of “going out into the field” was used specifically to tap into the thoughts and opinions of the respondents who utilise vehicle tracking technology on a daily basis. An explanation of each theme was presented, and was augmented through reference to the direct verbatim viewpoints of the respondents. A reflection of the themes and their subcategories rounded off each aspect of the discussion.

In Chapter 5, the results of the analysis presented in Chapter 4 were interpreted and measured against the emerging themes gathered from the semi-structured interview process that was followed in Chapter 4. The foundation of this chapter is based on the research topic: the value of vehicle tracking technology to recover stolen motor vehicles. An overview of each theme that was identified and discussed in Chapter 4 is presented and supported by the inclusion of

various authors' views, as presented in Chapter 3, to explore the importance of the use of technology to recover stolen and robbed motor vehicles. In this chapter, reference was also made to South African legislation pertaining to and focussing on vehicle crime, as presented and discussed in Chapter 2.

### **6.3 RECOMMENDATIONS DERIVED FROM THE FINDINGS**

The research indicates that although technology has vastly improved the ability to recover stolen and robbed motor vehicles there are still a number of shortcomings which inhibit the recovery of stolen motor vehicles. As a result, the findings presented in this study require recommendations on how the utilisation of vehicle tracking technology can be improved.

#### **6.3.1 Recommendations on formal agreements between Tracker and law enforcement agencies**

Although the SAPS/Tracker agreement is a huge success, bearing daily successes with regard to vehicle crimes, more agreements and alliances should be formed in order to effectively reduce and combat vehicle crime. It is recommended that formal agreements regarding the provision and utilisation of vehicle tracking technology be put in place with all role players in order to combat vehicle crimes. These recommendations include:

- The formal agreement between SAPS and Tracker, and the importance thereof, should receive increased exposure in print and electronic media.
- All Metro Police Departments should enter into a formal agreement with Tracker, similar to the SAPS/Tracker agreement, in order to utilise vehicle tracking technology.
- All municipal traffic departments should enter into a formal agreement with Tracker, similar to the SAPS/Tracker agreement, in order to utilise vehicle tracking technology.
- Provincial traffic departments should enter into a formal agreement with Tracker, similar to the SAPS/Tracker agreement, in order to utilise vehicle tracking technology.

- National traffic police departments should enter into a formal agreement with Tracker, similar to the SAPS/Tracker agreement, in order to utilise vehicle tracking technology.
- The South African National Defence Force border patrol units should enter into a formal agreement with Tracker, similar to the SAPS/Tracker agreement, in order to utilise vehicle tracking technology.
- The SARPCO community should enter into a formal agreement with Tracker, similar to the SAPS/Tracker agreement, in order to utilise vehicle tracking technology in the SARPCO region. This would enlarge the footprint for stolen or robbed vehicle recoveries, and increase the number of arrests of perpetrators.

The use of technology by these role players can have a positive spinoff to assist the SAPS in the tracking and recovery of stolen and robbed motor vehicles . While within the parameters of the country, with the co-operation and agreement with SARPCO countries, it is even possible that vehicle tracking technology can assist in recovering motor vehicles in neighbouring countries.

### **6.3.2 Recommendations on the effectiveness of vehicle tracking technology**

Vehicle tracking technology has proven to be extremely effective and serves a dual function: deterring potential vehicle thieves and robbers from committing such crimes, and assisting the SAPS in the tracking and recovery of a stolen or robbed vehicle. In order to improve the effectiveness of vehicle tracking technology, the following recommendations are made:

- Introduce national legislation for all new motor vehicles to be equipped with vehicle tracking technology.
- All recovered stolen or robbed motor vehicles that are impounded by SAPS should be equipped with vehicle tracking technology before such motor vehicles are released to their lawful owner.
- The feasibility of low-cost vehicle tracking technology, subsidised by government, should be researched and, if found to be viable, should be implemented.
- The short term insurance industry, the SAPS and vehicle tracking businesses should embark on increased awareness campaigns via various media sources to inform and

educate vehicle owners about the effectiveness and advantages of vehicle tracking technology.

Lacking the introduction of legislation that regulates that all motor vehicles should be equipped with vehicle tracking technology, the maximum effect of vehicle tracking technology will not be reached. If more motor vehicles are equipped with vehicle tracking technology the effectiveness thereof could be enhanced by means of deterring potential perpetrators and increasing the recovery of stolen or robbed motor vehicles. The introduction of such legislation could also lead to a dramatic increase in the arrests of perpetrators.

### **6.3.3 Recommendations on training interventions in vehicle tracking technology**

The continuous training of vehicle tracking technology operatives remains a crucial element in utilising such technology. As a result, training should take place regularly, to ensure that these operators are proficient in the application of vehicle tracking technology at all times. Subsequently, the following recommendations are made:

- All operational members from the SAPS: PES, such as the Flying Squad and the K9 units, should initially receive basic training in vehicle tracking technology when deployed to these units. First, special attention should be given to legislation pertaining to vehicle related crimes, such as vehicle theft and robbery. Second, attention should be given to the proficient utilisation of vehicle tracking technology.
- Refresher training should be provided annually to SAPS: PES members and other vehicle tracking technology operators.
- Training interventions should be both theoretical and practical.
- All SAPS: PES units should undergo the basic vehicle identification course, the crime scene investigation course, an interviewing techniques course and detailed statement writing courses, so as to assist them in their daily endeavours which are to, amongst others, track and locate stolen or robbed motor vehicles.

Without regular and sufficient training interventions, police officers' knowledge regarding appropriate legislation and application of vehicle tracking technology could be limited, thus

resulting in a recovery process that would not be optimal. Constant training could further enable first responders to vehicle related crime incidents, such as SAPS: PES members performing duties at the Flying Squad, K9 units and the TRT, to proficiently manage vehicle related crimes. Moreover, these first responders' proficiency in the procedures to follow after effecting arrests could also be improved by means of regular training. Training interventions could further sufficiently prepare police officials for court processes as they would be equipped with the necessary knowledge to facilitate improved conviction rates in criminal courts.

#### **6.3.4 Recommendations on the effectiveness of the SAPS to reduce vehicle related crimes**

It is evident that the SAPS cannot reduce crime, with specific reference to vehicle related crimes, on their own. Based on the findings of this study, the effectiveness of the SAPS to reduce vehicle related crimes on their own is limited. As a result, the involvement of private security businesses such as Tracker, play a significant role in reducing vehicle related crimes. The following recommendations are made:

- Enduring partnerships with reputable private partners, such as Tracker, should be built. These partnerships should be based on expertise in certain areas, such as vehicle tracking technology to enhance the effectiveness of the SAPS in the tracking and recovery of stolen and robbed motor vehicles .
- The disbanded SAPS: Anti-Hijacking Task Teams should be re-introduced to the service with immediate effect.
- SAPS detectives and prosecutors should work in synergy on vehicle theft and robbery cases, so as to enhance the effectiveness of the service in securing the convictions of perpetrators.
- Collaboration with various stakeholders within the criminal justice cluster should be strengthened to effectively address vehicle crimes.
- Vehicle tracking technology should be optimally utilised by the SAPS to enhance combatting vehicle related crimes.
- Attention should be given to the advice of experts in the field, and strategies which focus on problem crime areas should be implemented.

- Zero tolerance should be demonstrated for repeat and violent offenders, by means of providing no bail, no parole and no concurrent running of prison sentences.

Based on the findings of this study, it is evident that the SAPS are not effective on their own in addressing vehicle related crimes. Consequently, the SAPS cannot effectively address such crimes in isolation, therefore, all government and private role players, such as Tracker, should collectively join hands, share experience and work towards a common goal in order to enhance the effectiveness of the service in addressing vehicle theft and robbery.

### **6.3.5 Recommendations on effecting arrest of offenders who commit vehicle related crimes**

Based on the findings of this study, the utilisation of vehicle tracking technology by the SAPS vastly improves the members' ability to track stolen or robbed motor vehicles . This ultimately leads to an increase in the number of offenders who are arrested. It is thus evident that, without the utilisation of vehicle tracking technology, SAPS members find it difficult, and sometimes impossible, to arrest suspects. The following recommendations are made in this regard:

- Vehicle tracking technology should be utilised optimally by the SAPS to facilitate an increase in the arrest rate of offenders.
- All operational SAPS members should be familiar with and understand the provisions set out in the Criminal Procedure Act 51 of 1977.
- After the arrest of a suspected vehicle thief or robber, immediate interviewing of the suspect should be conducted in order to determine the modus operandi and status of the suspect, for example, is he/she wanted for previous offences.
- All forms of technology that are found in the suspect's possession should be confiscated and handed in as evidence, and for further investigative purposes. Technology found in a suspect's possession could include cell phones and signal blocking devices ("jammers").
- Forensic experts should investigate all related crime scenes in order to link the suspect not only to the possession of the stolen or robbed vehicle but also to any original crime that has been committed, and possibly others.

It is known that the majority of offenders are repeat offenders. As a result, by arresting these offenders and ensuring proper crime scene management, these culprits could be linked to other crimes. They could, therefore, receive a much harsher sentence if it can be proved that the arrestee is a repeat offender.

### **6.3.6 Recommendations on the role of vehicle tracking technology in the recovery of stolen motor vehicles**

Based on the findings of this study, it is clear that vehicle tracking technology plays a pivotal role in the tracking and recovery of stolen motor vehicles. It is also evident that this technology is relied on by the SAPS, on a daily basis, to ensure the recovery of stolen or robbed motor vehicles and to arrest the perpetrators. It is also clear that, without the use of vehicle tracking technology, the recovery of stolen and robbed motor vehicles will be minimal. This will definitely have a negative impact on crime statistics and have a negative ripple effect on the South African economy. In light of this, the following recommendations are suggested:

- All new motor vehicles should be equipped with vehicle tracking technology to simplify the recovery of a vehicle in the event of it being stolen or robbed.
- Recovered motor vehicles impounded by the SAPS, as a result of theft or robbery, should be equipped with vehicle tracking technology prior to handing the vehicle back to its lawful owner.
- Amendments to current applicable legislation, as discussed in Chapter 2, should be made to ensure that recovered and new motor vehicles are equipped with vehicle tracking technology.
- SAPS members performing duties within the Customer Service Centre should be sensitised to the importance of vehicle tracking technology in the recovery of stolen or robbed motor vehicles. If a vehicle is reported stolen, these members should timeously communicate the information pertaining to the theft or robbery to the relevant vehicle tracking company.
- All role players in the criminal justice cluster should receive training on the importance and advantages of vehicle tracking technology.

Based on the findings of this study, vehicle tracking technology plays a vital role in the successful tracking and recovery of stolen and robbed motor vehicles , and the subsequent arrest of offenders. As a result, such technology adds immense value to the operational functions of the SAPS, in the recovery of stolen and robbed motor vehicles . The absence of vehicle tracking technology proved to complicate the SAPS's task of tracking and recovering stolen and robbed motor vehicles to such an extent that it became almost impossible to achieve success.

### **6.3.7 Recommendations on enhancing the ability of SAPS members to recover stolen and robbed motor vehicles by means of vehicle tracking technology**

Based on the findings of this study, it is evident that the abilities of SAPS members to track and recover stolen and robbed motor vehicles are severely limited without the use of vehicle tracking technology. However, this technology enhances the abilities of SAPS members to track and recover stolen and robbed motor vehicles to such extent that it is possible to track and recover a stolen or robbed motor vehicle even when the vehicle is hidden. The following recommendations are made:

- All SAPS: Flying Squad motor vehicles should be equipped with vehicle tracking technology and not limited to a restricted number of motor vehicles .
- All SAPS: K9 units should be equipped with vehicle tracking technology.
- All SAPS: TRT motor vehicles should be fitted with vehicle tracking technology.

The ability of the SAPS to track and recover stolen and robbed motor vehicles could be further enhanced if all SAPS: Flying Squad, SAPS: K9 units and SAPS: TRT motor vehicles are fitted with vehicle tracking technology. This will provide additional capacity and value, as equipping all these SAPS operational motor vehicles with this technology could ensure even faster response times in search of the stolen or robbed motor vehicles, while ensuring the possibility of increased arrests.

### **6.3.8 Recommendations to facilitate the successful return of a recovered vehicle to its lawful owner**

Based on the findings of this study, the use of vehicle tracking technology significantly increases the possibility of returning recovered motor vehicles that were stolen or robbed to their lawful owners. Without the use of technology, a stolen or robbed vehicle might never be recovered due to the limited information at the disposal of the SAPS. However, the utilisation of vehicle tracking technology to track and recover stolen and robbed motor vehicles significantly improves the recovery rate of sought motor vehicles. The following recommendations are made, in this regard:

- Insurance companies should make it compulsory for all policy holders who own motor vehicles to have vehicle tracking technology installed. Such a strategy could improve the recovery rate of stolen or robbed motor vehicles .
- Insurance companies and the Criminal Justice cluster should embark on a national awareness strategy regarding the advantages of vehicle tracking technology.
- The SAPS should promote vehicle tracking technology internally and sensitise its members to the advantages of vehicle tracking technology.

Vehicle tracking technology has proven to be the only method currently used to speedily locate and recover a vehicle after theft or robbery. It is, therefore, possible to return the vehicle to its lawful owner and, consequently, minimise insurance claims made by policy holders; this will result in minimising the impact of these crimes on the economy. Recovered motor vehicles that are not fitted with vehicle tracking technology cannot be reunited with their legal owners, due to the removal of the identification numbers fitted to a vehicle. However, fitting vehicle tracking technology to a vehicle significantly increases the possibility of reuniting a vehicle with its lawful owner, in the event of theft or robbery. Vehicle tracking technology also prevents billions of rands from being lost, due to losses of motor vehicles as a result of crime, thus effectively saving the South African economy billions of rands annually.

## 6.4 CONCLUSION

This chapter summarises Chapter 1 to Chapter 5 of this study, after which recommendations were made to enhance the value of vehicle tracking technology to the recovery of stolen and robbed motor vehicles. Should the SAPS management, insurance companies and the vehicle tracking industry commit themselves to the recommendations made in this chapter, incidents of theft and robbery could decrease, the recovery of sought motor vehicles could increase, more arrests could be affected, and general vehicle related crimes could decrease. This study is important since it explores the value of vehicle tracking technology in the recovery of stolen and robbed motor vehicles .

This exploration of the research topic consequently indicates the effectiveness and the significance of vehicle tracking technology. The significance of the utilisation of this technology is illustrated and confirmed by the outcomes of the research, as demonstrated by the emergent themes and subcategories indicated in the study. The collected data, however, presents an extremely favourable picture of the value of vehicle tracking technology in the recovery of stolen and robbed motor vehicles , as experienced by SAPS: PES members performing operational duties on the ground level. It also reflects the provisions pertaining to legislation, policies, and directives governing vehicle related crimes.

In addition, the collected data highlighted the value of vehicle tracking technology to recover stolen or robbed motor vehicles from a national and international perspective. Answers to the research question, namely, What is the value of vehicle tracking technology in the recovery of stolen motor vehicles, Were comprehensively addressed. The SAPS/Tracker agreement could be used as a best practice model when considering public-private partnerships, as this partnership is extremely successful and very effective, and it illustrates how important and effective technology could be in addressing crime.

The researcher, however, points to the fact that there is currently no academic research conducted nationally on vehicle tracking technology and there is very limited international research that has been conducted on this subject. As a result, further research on aspects related to vehicle tracking technology in South Africa needs to be conducted. The SAPS is still facing various challenges in comprehensively addressing vehicle related crimes,

however, by establishing positive working relationships with the private sector and optimally utilising vehicle tracking technology, the theft and robbery of motor vehicles can decline.

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2006

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Attention: Prof J.G Van Graan  
Unisa

1 March 2015

## **APPROVAL TO CONDUCT RESEARCH**

### **TOPIC**

THE ROLE OF VEHICLE TRACKING TECHNOLOGY TO RECOVER STOLEN AND HI JACKED  
VEHICLES.

Authorization is hereby given to Willem Andries Senekal ID 7511125087089 UNISA  
Student no: 39983439, to conduct research on the above mentioned topic, in the  
degree Master of Arts : Criminal Justice, at the University Of South Africa (UNISA).

Mr Senekal is currently employed by Tracker Connect (PTY) LTD. Stonemill Office  
Park 340 Republic Road, Darrenwood, as a member of the Operational Response  
Services.

A handwritten signature in black ink, appearing to read "Ron Knott-Craig", written over a horizontal line.

**Ron Knott-Craig**

Operations Director

Tracker Connect Pty Ltd

Direct Line: +27 11 998 4679

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Mobile : +27 82 552 5350

[Ron@tracker.co.za](mailto:Ron@tracker.co.za)

Non-executive Directors: N Kolbe L Mynhardt M Kabi M Bomela A Aitken E Mbuthia J Newbury (Chairman)  
Executive Directors: A Hutcheson M du Preez

Tracker Connect Pty Ltd Reg No: 2011/003946/07 VAT No: 4130258884



## PERMISSION TO CONDUCT RESEARCH IN THE SAPS

**RESEARCH TOPIC:** THE VALUE TRACKING TECHNOLOGY IN THE RECOVERY OF STOLEN MOTOR VEHICLES

**RESEARCHER:** MR WA SENEKAL

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 months after signing.

Any enquiries with regard to this permission must be directed to Lt. Col. Peters or SAC Linda Ladzani at [PetersNS@saps.gov.za](mailto:PetersNS@saps.gov.za) / [Ladzani@m@saps.org.za](mailto:Ladzani@m@saps.org.za).

### RESEARCH LIMITATIONS / BOUNDARIES:

Research Instruments:	Semi-structured Interviews Structured Interviews Data Collection Data Analysis
Target audience / subjects:	Police uniform members (PES)
Geographical target:	Westrand ( West Rand Flying Squad )
Access to official documents:	No

A/  **DS DE LANGE** MAJOR GENERAL  
DEPUTY PROVINCIAL COMMISSIONER: HUMAN RESOURCE MANAGEMENT: GAUTENG

COLLEGE OF LAW RESEARCH ETHICS REVIEW COMMITTEE

Date: 2015-05-15

Reference: ST 69

Applicant: W A Senekal

Dear W A Senekal

**DECISION: ETHICS APPROVAL**

Name	W A Senekal
Proposal	The value of vehicle tracking technology in the recovery of stolen motor vehicles
Qualification	MA

Thank you for the application for research ethics clearance by the College of Law Research Ethics Review Committee for the above mentioned research. **Final approval is granted.**

*The application was reviewed in compliance with the Unisa Policy on Research Ethics.*

*The proposed research may now commence with the proviso that:*

1. *The researcher will ensure that the research project adheres to the values and principles expressed in the Unisa Policy on Research Ethics which can be found at the following website:*

[http://www.unisa.ac.za/cmsys/staff/contents/departments/res\\_policies/docs/Policy\\_Research%20Ethics\\_rev%20app%20Council\\_22.06.2012.pdf](http://www.unisa.ac.za/cmsys/staff/contents/departments/res_policies/docs/Policy_Research%20Ethics_rev%20app%20Council_22.06.2012.pdf)

2. *Any adverse circumstances arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the College of Law Ethical Review Committee.*



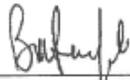
*An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants*

- 3. 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.*

**Note:**

*The reference number (top right corner of this communique) should be clearly indicated on all forms of communication (e.g. Webmail, E-mail messages, letters) with the intended research participants, as well as with the UREC.*

Kind regards



---

DR B HAEFEE  
CHAIR PERSON: RESEARCH ETHICS  
REVIEW COMMITTEE  
COLLEGE OF LAW



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PROF R SONGCA  
EXECUTIVE DEAN:  
COLLEGE OF LAW

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04 February 2016

To Whom it May Concern

I herewith confirm that I have proofread the following thesis:

Title of study: *The Value of Vehicle Tracking Technology in the Recovery of Stolen Motor Vehicles.*

Student Name: Willem Andries Senekal

Student Number: 3998-343-9

Institution: University of South Africa (UNISA)

Qualification: Master of Arts: Criminal Justice

I suggested relevant changes, where I saw fit, using the "Track Changes" function in MSWord; the student could thus either accept or reject the suggested changes at his own discretion.

I trust that this is in order.

Kind regards,

Nancy Morkel

MA English (NMMU), PGDHET (UFH), BA Hons English (UPE), BA MCC (UPE)

Editing Methodology (SUN)

[nancy.morkel@nmmu.ac.za](mailto:nancy.morkel@nmmu.ac.za)