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Critical infrastructure security and the role of private security service providers: Study of Kigali Special Economic Zone

A dissertation submitted in partial fulfilment of the requirement for the award of a Master's degree of Arts in Peace studies and Conflict Transformation.

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Musanze, May 2020

DECLARATION

I, Eric MURENZI hereby declare that this research entitled "Critical infrastructure security and the role of private security service providers: Case study of Kigali Special Economic Zone" is my authentic work. To the best of my knowledge, it contains no materials previously published or written by another person, no material which to a substantial extent has been accepted for the award of any other degree or diploma at university of Rwanda or any other Higher Learning Institution. Where other people's work has been used, due acknowledged has been made in the dissertation.

Eric MURENZI

Signed …………………

Date: ……../ ……../2020

CERTIFICATION

I, the undersigned, certify that I have read and hereby recommend for acceptance by the University of Rwanda, College of Arts and Social Sciences, Centre for Conflict Management the dissertation titled "Critical infrastructure security and the role of private security service providers: Case study of Kigali Special Economic Zone" in partial fulfilment for the Award of a Master's Degree in Peace Studies and Conflicts Transformation.

Signature ………………

Dr. Furaha UMUTONI Alida

(Supervisor)

Date: ……..../……../2020

DEDICATION

To my children Chloe Murenzi, Josh Murenzi and Caleb Murenzi, to my wife Jeanne de Chantal Musharankwanzi and my entire family, this dissertation is dedicated to you. Without your various support and prayers, it could not have been accomplished.

ACKNOWLEDGEMENT

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ABBREVIATIONS AND ACRONYMS

Art: Article

ASIS: American Society for Information Science

CCIP: Commission of Critical Infrastructure Protection

CI: Critical Infrastructure

CFR: Country Framework Report

CTED*:*   Counter Terrorism Committee Executive Directorate

CCTV: Closed-circuit television

CIWIN: Commission of a Critical Infrastructure Warning Information Network

EU: European Union

EPCIP: European Programme for Critical Infrastructure Protection

Et al.: *Et alia* (and others)

FICCI: Foundation of Indian Chambers of Commerce and Industry

ISCO: Intersec Security Company

KSEZ: Kigali Special Economic Zone

MININFRA: Ministry of Infrastructure

NST: National Strategy for Transformation

PEZ: Prime Economic Zone

PSCs: Private Security Companies

PSSPs: Private Security Service Providers

PSI: private Security Industry

RNP: Rwanda National Police

RPSIA: Rwanda Private Security Industry Association

SRIC: Security Research and information Centre

SEZ: Special Economic Zone

SOP: Standard Operating Procedure

UK: United Kingdom

UN: United Nations

UNOCT: UN Office of Counter-Terrorism

UNODC: United Nations Office on Drugs and Crime

ABSTRACT

This study investigates the Role of Private Security Service Providers (PSSPs) in the security of Critical Infrastructures (CIs) in Kigali Special Economic Zone (KSEZ). The main objective of this study is to assess the contribution of private security service providers in securing critical infrastructures located in Kigali Special Economic Zone while specific objectives were designed in order to find out the contribution of PSSPs' security operational activities; patrols, static guards, access control and monitoring Closed-Circuit Television (CCTV) feeds and to assess the contribution of PSSPs collaboration with other security organs in securing CIs in KSEZ. This study was used multiple stream theory and it followed a qualitative research design; interview and focus group discussion were conducted with 28 respondents selected through a purposive sampling strategy. The study findings established the contribution of PSSPs in securing CIs in KSEZ. In this regard, the study findings revealed that PSSPs use static security guards, patrols and CCTV in securing KSEZ's critical infrastructures. Furthermore, the study findings disclosed an effective collaboration between PSSPs and Public security organs and collaboration between PSSPs themselves. This collaboration focuses mainly on mutual security operation support, technical advice, supervision and training.

However, the research findings identified some challenges obstructing PSSPs to effectively perform security operations protecting KSEZ's CIs. These challenges include limited capacity in terms of personnel and equipments; poor recruitment and poor quality of training of security personnel; insufficient number of female security guards during the recruitment and deployment of personnel; lack of centralized PSSPs 'personnel data base, nature of the location of KSEZ and the surrounding areas. Given these challenges, the study suggested to improve PSSPs' personnel welfare, professionalism and to hire more female security guards; PSSPs adherence to rules and regulations, a Standard Operating Procedures (SOPs) to be set to regulate the security operational activities; to put in place a centralized PSSPs' personnel data base and encouraging KSEZ business operators to have minimum security equipment and transform KSEZ location into a conducive environment for environment facilitating PSSPs security operations.

Key words: *Private security service providers, Critical infrastructure security*.

CHAPTER ONE: GENERAL INTRODUCTION

1.1 Background of the study

The traditional and modern policing growth involved public and private sectors in security functions. Scholar such as (Sparrow, 2014, p.4) indicate that "private security was the only way of policing before the establishment of the modern way of policing, however the situation changed at the beginning of industrialization, urbanization and the growth of the modern state". In this perspective, Minnaar, (2004, p.25) argues that "up to the 1960s, the majority of police institutions in different countries monopolized the security sector". Private policing concept evolved gradually at the end of 1980s. During this period, private security became immensely a considerable profitable business for different corporations primarily founded on house security (Gill, 2014).

In view of that, the United Nations Office on Drugs and Crime (UNODC) states that the private security industry underwent an outstanding growth in recent decades as a result of different factors which prominently include the ineffectiveness of some police organizations in protecting citizens, the expansion of private sector which increased the security demand, the growth of private property such as shopping malls, industries, the expansion of cities and the increased fear of terrorism, all these factors pushed people's security consciousness and alerted them not relying only on security provided by police and other security institutions (UNODC, 2014).

The recent growth of private security industry varies worldwide. In this regard, the statistics of private security companies in developed countries and developing countries reveal an impressive disparity in development of private security companies. In UK, the records indicate that the number of private security guards is almost twice that of the public police, while it is almost three to one in the United States. In Hong Kong, the number is five to one, and in some developing countries it may be as high as ten to one (Abrahamsen and Williams 2007).

In India, the Foundation of Indian Chambers of Commerce and Industry (FICCI, 2013) states that, private security industry is one of the biggest sector employing more than 6 million security guards countrywide.

In Africa, due to the increase of developmental activities, local and foreign investors in different countries, private security companies become more involved in security of people and property especially in the protection of critical infrastructures. For example in the Democratic Republic of Congo, they have around one hundred PSCs employing over thirty thousand security personnel, active everywhere from Kinshasa to the copper belt in Katanga and eastern Congo. In Kenya, over 2000 security companies operate countrywide (Schouten, 2017).

In Uganda, more than 60 private security companies are involved in security business according to the Ministry of local government (2019). In Tanzania, there are more than 400 security companies (Tanzanian Security Industry Association, 2019.)

In Rwanda, Private security Companies are governed by the provision of the law n° 31/2014 of 19/08/2014 and the statistics show that they evolved rapidly from 1 to 16 companies within a period of 21 years (1997-2018) (RNP, 2018). Currently, there are 17 licensed Private Security Companies in Rwanda and other 23 have applied for operational license since the establishment of the first private security company (Intersec, now ISCO) in 1995 (RNP Report, 2019).

The functions of private security companies vary worldwide depending on the regulations of every country. Commonly, the duties of private security companies focus on detecting, deterring, observing and reporting to the Public Policing institutions about the security situation in the area of responsibility under their control (Simon and Angelina, 2009). They have generally a duty to protect the customers and their properties from various hazards (in form of criminal acts) and honor the obligations provided in contracts concluded between the private security providers and their customers (Santonen and Paasonen, 2017). Generally, these contract obligations are cantered on securing the premises, critical infrastructures, patrols, responding to alarm calls among others (Nalla and Crichlow, 2017).

In Rwanda, the functions of Private Security Service Providers (PSSP) are listed under the Law n° 31/2014 of 19/08/2014 in its article 6 focusing mainly on 7 security operations, including the protection critical infrastructure. At this point of view, a Critical Infrastructure (CI) consists of a set of systems and assets, whether physical or virtual, so essential to the nation that any disruption of their services could have a serious impact on national security, economic well-

being, public health or safety, or any combination of these (USA, Homeland Security Department: HSD, 2019).

The critical infrastructures play a great role in development of individuals in their lives and the country (Rut, Curt, 2016). Due to this contribution in development, they are soft targets and vulnerable to insecurity caused by different criminals targeting to destabilize individuals' lives, properties and the economic security (US, HSD, 2019). Cases of theft, death of people, terrorism, attacking government infrastructures with intention to destroy them and/or disseminating the fear of criminality among the community are insecurity cases recorded by security organs in developed and developing countries (UNDOC, 2017). The level of severity of these insecurity cases varies from one county to another.

Unquestionably, the sensitive role of critical infrastructure in people daily life and future development of the country is a key factor justifying the importance of the protecting the critical infrastructures. According to (Setola, 2017) a number of countries started reconsidering the vulnerability of their infrastructures in the last decade of the previous century. With this regard, different case studies indicate that the attempt of different countries in considering the importance of critical infrastructure in their development and putting forward the critical infrastructure protective strategies and mechanisms.

In Europe, the European Council of June 2004 requested member states elaborate plans aiming at the preparation of an overall strategy to protect critical infrastructures. The Commission later adopted on 20 October 2004 a Communication on Critical Infrastructure Protection in the fight against terrorism with suggestions on strategies that would enhance prevention, preparedness and response to possible terror attacks that may target Critical Infrastructures (Mathew, Edward, 2014). In November 2005, the Commission adopted a document on a European Programme for Critical Infrastructure Protection (EPCIP) which provided policy options on how the Commission could establish EPCIP and the Commission of a Critical Infrastructure Warning Information Network.

In United States of America, discussions about critical infrastructure protection started in 1996, when President Clinton formed a Commission that was mandated to look how Critical Infrastructure Protection can be enhanced. The Commission's 1997 report, *Critical Foundations*, established the central premise of infrastructure protection efforts: the economic prosperity, military strength, and political vitality of the United States all depend on the continuous functioning of the nation's critical infrastructures (US President's CCIP, 1997).

In line with the protection of critical infrastructures, (Izuakor, 2016) stated that "US and Australia were amongst the leading nations that sensed a potential, even larger security problem likely to face the critical infrastructures in these countries". In addition to this discussion, the UN Security Council resolution 1373 (2001), emphasized on the importance of protecting critical infrastructure against possible terror attacks and for the sake of national safety and the economic stability of the member states (UN, 2018).

In Africa particularly in sub Saharan Africa, governments are also engaged in prioritizing the importance of protecting critical infrastructures. However Public security providers cannot cover the security of all critical infrastructures, that's why Private Security Companies are increasingly involved in securing them. In Kenyan for example, even though Kenya has a long history in private security whereby some security companies operated since 1960s such as KK Security and Factory Guards (now Security Group) and Securicor, but since the 1998 terror attack on the US Embassy in Nairobi and other terror incidents that occurred in recent years has made private security industry to grow faster due to their role in securing key areas including critical infrastructures (Rita, Michael, 2005).

In Rwanda, the critical infrastructure protection is the responsibility of public security providers especially Rwanda National Police (RNP) however the RNP collaborate with other security organs, judicial and public organs as well as other organs that may assist in accomplishing its mission and share information with them in order to maintain public order according to the Law n° 46 of 14/12/2010 governing the RNP in its articles 40 and 41. Due to the fact that the RNP cannot cover the security of all critical infrastructures, the security of some of these critical

infrastructures is provided by private security service providers including Critical Infrastructure (CIs) located in Kigali Special Economic Zone (KSEZ).

Though tremendous successes have been recorded in their performance, there were also cases of failure which led customers to question their capabilities and professionalism in ensuring security (RNP, 2019) and so far no specific study was conducted to assess the role of Private Security Service Providers (PSSPs) in securing CIs. Thus this explored the role of PSSPs in securing CIs: Case study of Kigali Special Economic Zone, 2013-2019.

In this study the term Private security service providers (PSSP) is used according to the Law n° 31/2014 of 19/08/2014. However, in some cases it is used interchangeably with Private Security Industry (PSI) and Private Security Company (PSC) as it is in some literature.

1.2. Statement of the problem

When private security companies (PSCs) perform well their duties, it ensures security of property, individuals and critical infrastructure of which they are responsible for. The good performance of PSCs also serves as force multiplier as it makes public security providers work easier (Laing et al, 2013).

Public security organs are more engaged in fighting criminals who are favoured by modern technology and globalization. This situation has prompted governments to allow private security companies to expand their role in some sensitive tasks such as the security of critical infrastructures (Nalla and Crichlow, 2017).

KSEZ is one of the critical infrastructures that was created in 2010 by the government of Rwanda with the ambition to prioritize and protect industrial development by focusing on environmental protection and attracting investors to increase business activities (Revised Special Economic Zone Policy, 2018). There is strong global recognition that the security of critical infrastructure needs to be improved due to their role in everyday life of nations (Petit et al, 2018)

Currently, the security of KSEZ is provided by different PSSPs through static guards, Patrols, access control of the premises, manning control rooms in monitoring CCTV feeds among others (RNP, 2019).

Despite the above mentioned duties and efforts by PSSPs, cases of insecurity are being recorded. According to the Prime Economic Zone Ltd (PEZ) the entity that manages KSEZ and other Special Economic Zones in the Country. According to their reports, there have been cases of theft whereby people manage to access KSEZ premises by cutting fence and stole construction materials at the sites and some goods from the factories, cases of stealing electrical cables also have been registered.

If this situation is not addressed, it will affect the assurance of investors and critical infrastructure will be affected which at the end can affect the economy of the country especially economic security as one of the seven element of human security (UNDP, 1994). Therefore this research assessed the contribution of private security service providers in securing critical infrastructures located in Kigali Special Economic.

1.3. Objectives of the Study

The present research objectives are sprinted into general and specific objectives.

1.3.1. General objective

To assess the contribution of private security service providers in securing critical infrastructures located in Kigali Special Economic Zone.

1.3.2. Specific objectives

Scholars in field of research suggest that any study must have a purpose (Kumar, 2014) which mainly focuses on solving a practical problem or to improve a procedure or framework to accomplish a given duty. Thus, this study focused on the following specific objectives:

   a. To explore how Private Security Service Provider's mobile patrols and static guards contribute to the security of Kigali Special Economic Zone.

b. To investigate how monitoring CCTV feeds contribute to the security of Kigali Special Economic Zone.
c. To assess the contribution of Private Security Service Providers collaboration with other security organs in securing Kigali Special Economic Zone.

1.4. Research questions

The following main and sub research questions helped this study to focus on the research objectives in order to address the research problem.

1.4.1. Main research question:

How do Private Security Service Providers contribute in securing critical infrastructures located in Kigali Special Economic Zone?

1.4.2. Sub-questions:

a. How do Private Security Service Providers mobile patrols and static guards contribute to the security of Kigali Special Economic Zone?
b. How does monitoring CCTV feeds contribute to the security of Kigali Special Economic Zone?
c. How does collaboration with other security organs contribute to security of Kigali Special Economic Zone?

1.5. Scope of the study

This study investigates the critical infrastructure security and the role of private security service providers, Case study of Kigali Special Economic Zone located in Masoro hill, Gasabo District in the City of Kigali (Law n° 29/2005 of December 31, 2005 establishing the administrative entities of the Republic of Rwanda). It will also cover a period of 2013-2019 based on the period when KSEZ started running its business activities (MINICOM, Revised SEZ Policy, 2018).

1.6. Significance of the study

The security in development of the country is fundamental principle worldwide and particularly in Rwanda. Undoubtedly, the economic growth depends on security, effective   management of critical infrastructures and protection of people in all sectors. This is the responsibility of public and private security organs. In the same line, (Santonen and Paasonen, 2017) suggests the

partnership between public security and private security institutions as the best way in providing the safety to critical infrastructures and lives of the persons.

This study assessed the contribution of private security service providers in securing critical infrastructures located in Kigali Special Economic Zone. It is hope that the study findings from the research will provide relevant institutions with a clear view of the extent at which PSSPs security operations contribute to the security of KSEZ. It will be beneficial for the academic relevance as well as the research findings will serve as reference material for future academic researchers helping them to improve their studies. Empirically, this study provides knowledge from the various group themselves involved in businesses in the KSEZ.

1.7. **Study structure**

The study comprises five chapters. The first chapter describes the general introduction which is the core subject matter under study. The chapter two discussed academic literature review in line with the above mentioned topic under investigation; it looked on international, regional and local perspective security management of critical infrastructures, security operations conducted by private security service providers and how they collaborate with others security organs mainly the RNP for better achievement of their goals. The third chapter mainly presented the methodology used for in this study. The fourth chapter focused on the presentation of findings while the last chapter presented the summary of the study, the conclusion on research findings and recommendation for further research.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

This chapter reviews the literatures on the role of Private Security Service Providers (PSSPs) in securing Critical Infrastructures. It also addresses the definition of the key concepts, theories on factors underling private security operational activities, PSSPs mobile patrols and static guards, monitoring CCTV feeds, PSSP collaboration with other security organs and the security strategic framework into force in protection of critical infrastructures in Rwanda.

2.2. Definitions of key terms

Scholars have highlighted the importance of defining the key concepts of the study. (De Beer, 1999, p.5) states that "the definitions in any study clarify the intended meaning of the terms and link it to a particular study". In this regard, a particular and close attention should focus on details, nuances, and conceptual clarity (Patti et al., 2013). In this perspective, scholars and operational definitions were given to the key concepts: "Critical infrastructure security and Private security service providers".

2.2.1. Private security service providers

Scholars have suggested developing a good and standardized succinct definition embracing the concept "Private security service providers (PSSPs)" in order to avoid the narrowness of some recent definitions. According to Kakalik and Wildhom as cited in (Strom et al, 2010) the term "Private security" entails "all categories of private companies and individuals providing security-related services such as investigation, guard, patrol, lie detection, alarm, and armored transportation". PSSPs, were again defined as entities providing private policing based on contracts, they perform their work the way public police conduct theirs. PSSPs do protection of people, provide security of properties, information sharing with other security organs, investigating crimes, and providing security of assets and institutions (ASIS, 2009, p.18).

Indeed, the PSSPs are not similar everywhere, as stated by (Steden and Sarre, 2007), they are comprised by "a multitude of large and small scale industries, regulated by the provision of

security services, investigations, crime prevention, public order maintenance and security design".

Equally, (Abrahamsen, 2011, p.27) states that "PSSPs include institutions other than police assigned with crime prevention, protecting the harm infringing the people, institutions, or facilities". In Rwandan private security service providers (PSSP) are regulated under the Law n° 31/2014 of 19/08/2014. However, the emphasis of this law is on the establishment of a security provider and its security services, while the definition of PSSP its self has been left aside. In the context of this study, the term "private security service providers" refers to an individual/staff and private security business companies, measures and efforts aiming at providing the protection for persons and property.

2.2.2. Critical infrastructure

It is difficult to find a universal definition of the concept Critical infrastructure. However, many countries have their own definitions according to the local or regional legislations. Australia and Canada define Critical infrastructure as those physical facilities such as supply chains, information technologies and communication networks that if anything wrong happen to them can heavily impact on the social, economic well being of the country or can affect the national defense capabilities to ensure national security (Izuakor, 2016). In the United States of America critical infrastructures are defined as vital infrastructure that their incapacity or destruction would impact seriously on defense and economic security of the US (Zeadally and Alcaraz, 2015).

According to the European Union (EU) commission, Critical infrastructures are defined as "assets, system essential in maintaining the vital societal functions, safety, economic or social well-being of people and any disruption or destruction of these infrastructure can cause considerable effects due to the failure to preserve their functions" (Gritzalis et al, 2019).

Even though, parts of the world define Critical infrastructure differently, they have common key words found in those definitions. All the definitions tackle on the sensitivity of critical infrastructure in terms of their reliability of the functioning of the country more specifically on the wellbeing of the people.

The United Nations also through the UN Office on Drugs and Crime (UNODC) suggested criteria to base on in defining Critical Infrastructure which are "the role of infrastructure, and the impacts of a damaged or deteriorated infrastructure and the contribution of a particular critical infrastructure in preserving human rights, dealing with human rights security threats and effects caused if it is destroyed or displaced from its initial position" (UNODC, 2018). The focus of the UNODC on CIs matters is to prevent any disruption of these vital installations because of what would happen and consequences to the well being of people if they are not well protected.

Most of the countries have invested much in infrastructures that are vital for the national security and economic security after the World War 2. The protection of these vital infrastructures was a top priority during the cold war. However, in 1990s after the cold war critical infrastructure security was a bit relaxed until the terror attacks of September 11, 2001 in the US (Lazari, 2014). Similarly, the security of critical infrastructures is very essential, because the failure of these infrastructures can impact on the whole life of the country. The interdependency of these critical infrastructures is also another reason to enhance their protection because if anyone of those is disrupted it can affect many others (Keupp, 2020).

In Rwanda, there is no harmonized single definition that would accommodate Critical Infrastructure Security Plan. However in the context of this study, critical infrastructures have to be understood as any physical structures and facilities such as industries, warehouses, storage facilities, water, internet, telecommunication system and electrical infrastructures installed in Kigali Special Economic Zone (KSEZ) to facilitate the smooth running of the Kigali Special Economic Zone (KSEZ) activities.

Industries, warehouses and storage facilities that are in KSEZ are vital to the Rwandan economy as they enable the flow of supply chain and the effective delivery of services and goods to the population. As stated by (Keupp, 2020, p.95-96), "A complete national economy is modelled as a supply chain, and supply chain disruption risk is conceived of as a threat to the effective delivery of goods and services to the population". In this regard ensuring the security of these Critical infrastructures is paramount.

2.3. Theoretical framework

Theoretical framework is important in any study. It helps to determine and explain the relationship between variables and systematically examine the problem or the phenomenon under study. At this point of view there is a series of theories, and researchers must select an appropriate theory supporting fundamentally the discussion of the study. As mentioned by scholar such as (Kumar, 2014), examining literature is a demanding task compare to the limited time of the researcher. By this fact it is very important to focus on relevant literatures to the topic and identify theories connected to the problem under study. Similarly, this research assesses the contribution of PSSPs in securing CIs in KSEZ.

Countries' efforts in the development and protection of CIs are very essential as modern societies rely on the continuous and reliable of availability of a number of products and services provided by these CIs (Javier, Roberto, Stephen 2012). Different studies identified the evolution and involvement of Private Security Companies (PSC) in the security of CIs (Ted, 2015). The involvement of PSCs in securing CIs is mainly linked to two reasons (limited number of public security organs and the fact that private security industry is lucrative sector that attract investors in this field). However, the security remains a public good, which means that, public institutions have the responsibility to closely monitor the security situation despite who is providing it (Knudsen, 2001).

With a view to establish the contribution of PSSPs in protection of CIS in KSEZ, this study will use a multiple stream theory. This theory was selected based on its advantages of examining current ongoing applicability and relevance of policies on critical infrastructure protection framework in Rwanda (Daniel and Michael, 2016).

The multiple stream policy theory was developed by John W. Kingdon. In his work entitled "*Agendas, Alternatives, and Public Policy*" published in 1984 Kingdon as cited in (Cairney and Jones, 2016). Generally, the Multiple streams Analysis (MSA) comprises basically three streams: problem stream (attention is focused on identification of the policy problem on the field), policy stream (attention is directed to the development and avail solutions and alternatives anticipating the problem and subsequent effects) and the political stream (Policymaker have essential motives

and opportunity to convert solutions into a policy). In fact, scholars explain these three steams (problem identification, development of solutions, and the choices are relatively independent (Daniel & Michael, 2016). Similarly, Kingdom suggests that these three separate 'streams' must come together and entrepreneurs should exploit a brief 'window of opportunity" for the policy change (Colebatch, 2005). In fact, (Sabatier 1991, p.73) argued that "the problem stream or political stream can create the governmental agenda or open a policy window and the alternatives are influenced more by the policy stream".

The MSA theory contends that the way people live depend contextually on different factors surrounding it. These factors include the existing policies, defined political environment, systems and procedures regulating the future of the people. Thus, the implementation of the policy should reflect the realities and it shall form the basis for the formulation of objectives (Sabatier, 1991). Indeed, the MSA theory, will in context of this study help to identify the current situation of critical infrastructures and private security operations and determine if they match with the security preventive policies. Moreover, this theory helped finding out if security strategies and policies into force in Rwanda to respond to the realities of the population life with regard to the protection of KSEZ.

2.4. Conceptual framework

The discussion on empirical literature review presented in this study focuses generally on two main variables: the role of PSSPs in securing CIs located in KSEZ and CIs security protection as it is depicted in the next chart.
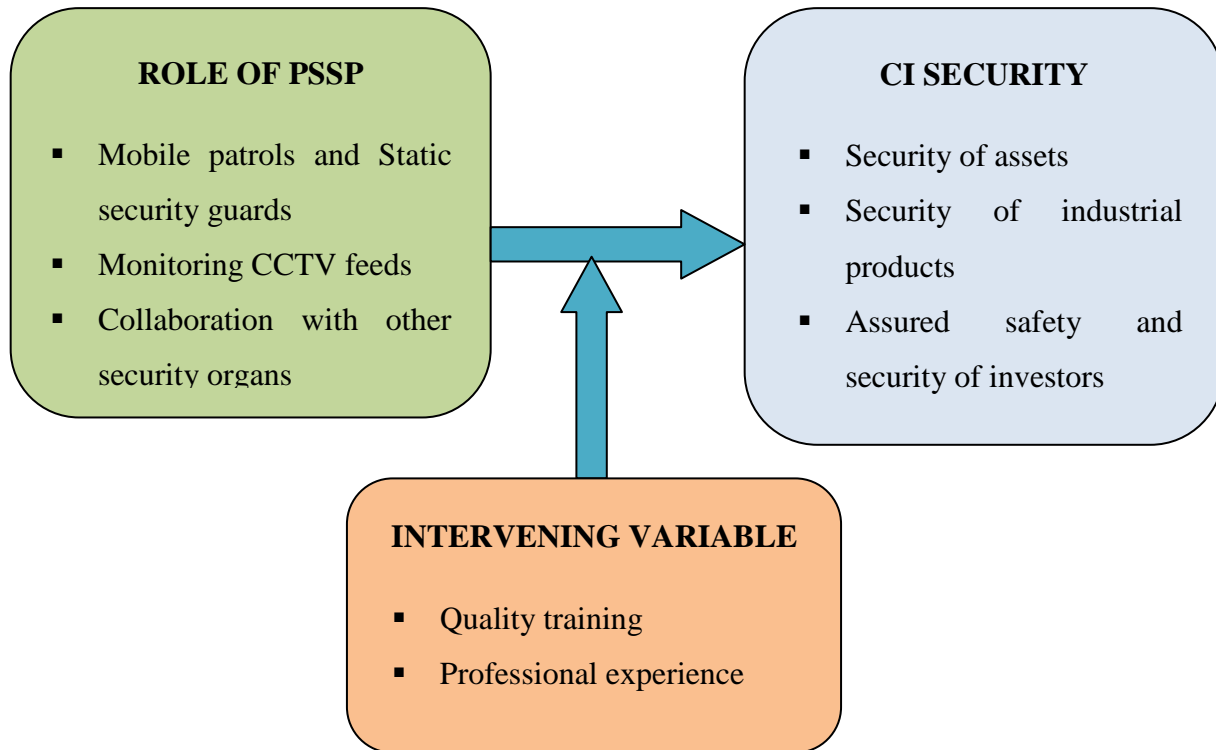
2.5. Private Security Service   providers functions

One of the recommendations of the UN Conference (18th session of UNCCPCJ, 2009) was to ascertain the contribution of PSSPs and evaluate the effects of PSSPs services in crime prevention and community safety. The reports from the majority of the countries reported a positive PSSPs contribution in maintaining public order and security in their respective countries.

Evidently, this information was also confirmed by different recent studies (Gill, 2014) indicated that the size and the contribution of PSSPs increased drastically worldwide. This resulted in constant upward high demand of the PSSPs in protection of lives and properties in different countries. This growth of PSSPs industry result was motivated by escalation of crime which has overwhelmingly prevailed over the amount of public resources invested into the public security sector. In a view to prevent this security threats, the private security providers are engaged in a numerous activities including guarding, performing surveillance work, patrolling private and

public venues, escorting dangerous goods like explosives, acting as private body guards, performing security consultancy services, deployed to guard public events such as as sports events among others.

In this context, the PSSPs are generally accepted important partners in crime prevention and detection. Scholars (Prenzler and Milroy, 2012) argue that "companies offer different services such as security guard duties, protecting cash in transit, armed response to private investigations among other functions". Also according to (Abrahamsen (2005, p.45) "the majority of the companies offering security are becoming more professional with majority of them integrating the use of technology and equipment like satellite tracking systems, radio alarms, panic buttons and armored vehicles in their operations". Private security providers play a significant role in security sector and they perform sensitive duties such as alarm response, cash carrying, guarding, investigation work executive protection and security consulting ((Nalla and Crichlow, 2017). In this regard, different methods helping the private security to achieve their mission are discussed in next subsections.

2.5.1. Patrols and static security guards

As previously discussed, security focuses on safeguarding people's life, protecting the property from any kind of threats. According to (Donnelly, 2013), the process of providing security to the persons and property includes denying access to the person who are regarded as different and those who are deviants to acceptable behaviour likely to cause troubles. Even though this duty is a core responsibility of Police institutions, the experience shows that it is also a PSSPs profession (Crawford, 2003). In modern policing, the police effectiveness in providing security requires public police institutions to involve other partners in implementation of pro-actives and re-actives strategies helping to handle crimes in community (Dempsey and Forst, 2009). In this context, a "security guard" will involve any person who performs different security related functions activities including PSSPs personnel.

The PSSPs institutional guidelines should specify the scope of activities to be carried out in exercise of PSSPs functions. According to (Donnelly, 2013), different private security service

providers sectors were divided into five categories; "guarding services, technology, security hardware, event management, and industry specialist".

In fact, this subsection defines the functions of the private security providers' officer. Officers on duty generally patrol in their areas of responsibility. The objective of patrol and the areas of responsibility should be well defined in contract.

Patrol generally focuses on preventing crimes to happen, patrols can enable the security personnel to apprehend the suspected criminals but also serves as an assurance to people around. In the context of this study PSSPs patrols help security guards to ensure security around the premises and security assurance to business owners (Christopher, 2008).

Patrols are classified into three major types: active patrol, random patrol, and directed patrol. The active patrol intends to exploit different opportunities helping to discover, detect, observe, and interdict the unusual event. With regard to the random patrol, patrol itinerary should be randomly and varied selected in order to avoid the potential criminals that should predict the patrol modus operandi.

The directed patrol focuses more attention and efforts on responding and decreasing considerably crimes on critical areas. Given the three types of patrol strategies, a patrol officer on duty may use any tactics or techniques to achieve its assigned mission which is the provision of the security of his area of operation (Strom et al., 2010). According to (Wolfgang, 2005), "static guards and site patrols are principal duties of private security personnel, however there are other connected duties such as alarm responses, relief/responsive guard services, and alarm service/installation. These services include both an on-going security presence and regular external and internal patrols of the areas of responsibility". The type of duties performed by a particular PSSP depends generally on the environment in which the facility to be secured is located but also on the contract between customers and PSSP.

2.5.2. Security guard functions

Static duties have an objective to show the private security providers' force and prevention of crimes. Security guard functions focus generally on deployment of uniformed private security

officers, showing their presence in predetermined positions in each site outlined and focuses on maintaining that predetermined positions. According to (Santonen and Paasonen, 2017), the following are the main duties to be accomplished by PSSPs while performing static guard duties:

- To maintain a record of incidents and sheet describing the general duties every shift;
- To check and ensure that all perimeter doors and entrance are safe and secure;
- To assure that internal floors and/or areas is safe;
- To write down an identification record of the persons found on the premises;
- Monitoring the movements, guiding and escort unauthorized persons from the premises to designated area for further management;
- To switch off unnecessary lighting and reporting where they are repeatedly found left on;
- To immediately respond to fire alarms and identify cause of alarm;
- To report any of security incidents, building faults happened or unpredictably likely to happen;
- To report on any of identified issues found during the patrol;
- To show professionalism and ethics governing maintaining good order and conduct within the site and surrounds.

Indeed, a profound theoretical foundation flourished on PSSPs indicates that they are viewed as an important strategy in crime prevention. They have shown efforts in prevention, limitation or control of the level crime and disorder in society.

2.5.3. Collaboration between Police and PSSPs

As earlier mentioned, a depth of theoretical foundations on private security has been written by different scholars. Generally, authors indicate the community becoming more relying on PSSPs, this situation results into an increasing demand and growth of the private security. In this context, Police and PSSPs partnership in preventing and detection of crime are globally acknowledged). The scope of PSSPs activities helping police involve guarding, performing surveillance work, patrolling private and public venues, escorting dangerous goods like explosives, acting as private body guards, performing security consultancy services among others (Gill, 2014).

Briefly, these tasks of PSSPs are similar to the activities of conventional policing, as mentioned by (Williams, 2005, pp. 316-39) "PSSPs are viewed as a form of police privatization and new form of social control". The involvement of PSSPs in Police activities has reduced the workload of police and has increased the PSSPs effectiveness and increase in number (Jones and Newburn, 1998).

However, as mentioned by ((Nalla and Crichlow, 2017), PSSPs have to understand that similarities of duties between them and Public security organs cannot be a pretext to overlap public security organs in their mandate.

In fact, it is by principle that security is a public good. Subsequently, the police have a complete monopoly over the management and regulation of the private security firms, establishment and approval of new companies (Liu, 2005, p 47). In this perspective, the police officers are seconded to the private security companies and are integrated into their daily operations (Keku et.al. 2003). In this context, the private security companies lack the law enforcement powers which the police have, and thus, they have to depend entirely on the police when they are deployed to guard public events such as sports activities (Liu 2005, p. 47).

Regardless of these differences, scholars suggest collaboration between Public Police and PSSPs. In the same context, (Strom, et al., 2010, p. 5-1) stated that "PSSPs and the public police are complementary to one another". Collaboration between PSSPs and the police can have an evidently outstanding impact on police routine activities and special operations (emergency time response, CIs and facilities protection, and information sharing), however PSSPs rely much on police especially when difficult situations arises and when dealing with matters beyond their competences and capacities (Emmanuel, 2016, p.59).

In Rwanda, PSSPs have a duty to collaborate with other organs (Law n°31/2014 of 19/08/2014 governing PSSPs, art.15). However, in this law, areas of collaboration are limited only to reporting and exchange of information; the collaboration in terms of their duties is not mentioned. This framework of information sharing focuses reporting to RNP the PSSPs daily security situation, notifying the area of control, reporting any incident that occurred or likely to

happen and undermine the security (Law n°31/2014 of 19/08/2014 governing PSSPs, Article 16).

2.6. Critical Infrastructure Security

Critical infrastructures are important in all aspects of the development of the people. The daily life of a person depends on these infrastructures as they help to satisfy the human being basic needs.

In fact, these basic needs focus on infrastructures and facilities that help the normal functioning of the wellbeing of the population such as electricity, roads, water and sanitation systems, health care deriver systems, factories, markets, classes, etc. The failure to obtain these infrastructures can cause diversified consequences including the incapacity to deliver adequate or even life-saving health services, environmental disruption and destruction, death of persons, forced displacement (UNOCT, 2018).

In fact, the role of critical infrastructures in all sectors dimensions in the country (economic development of the country, national security, public health, etc.) make critical infrastructure the soft targeted vulnerable to security threats and susceptible to criminal attacks. Depending on security plans in every country, different countries in developed and developing world, develop a critical infrastructure protection plan, and enact regulations of its implementation for the development of the country. According to European Programme for Critical Infrastructure Protection (2006); "the A critical infrastructure protection plan identify of a set of different assets system, facilities vital to the survival of the nation security and establish the a holist protective rules and regulations perspective, and recovery or minimum repair approach in case of unpredicted incident or attacks from criminals".

Based on a great role of the critical infrastructures recognized by different countries and their vulnerability to security threats, countries adopted a holistic protective perspective of critical infrastructure (Zeadally and Alcaraz, 2015). However, there isn't a single regulation governing and identifying critical infrastructures in Rwanda. Indeed, the critical infrastructure protection in Rwanda developed based on critical guidelines and themes guiding the Vision 2020. In fact, the

ambitions of vision 2020 focus on refurbishment and development of the vital economic infrastructure. This government commitment expressed in the vision 2020 displays the recognition of the importance of critical infrastructure development and protection in development of Rwanda (World Bank, 2005).

The protection of critical infrastructure in Rwanda is tailored on the government commitment encouraging private sector participation and private investments (foreign and locals) in economic development of the country. This critical infrastructures protection was also reiterated in policy for infrastructure refurbishment, operation, and improvement in Rwanda, and the Rwanda Country Framework Report (CFR) that evaluated the infrastructure in the transport, energy, water and sanitation, and telecommunications sectors in Rwanda Public-Private Infrastructure Advisory Facility and the World Bank Group report of 2005.

The CFR main objective was to examine the status of infrastructures sector in Rwanda, and the institutional and policy frameworks regulating them, assessing the different opportunities associated with engaging the private sector in infrastructure, detailing the necessary policies and actions that will support the effectiveness of private sector in improving Critical infrastructure development and protection (The Public-Private Infrastructure Advisory Facility and the World Bank Group, 2005). In addition, the Transport Sector Strategic Plan for the National Strategy for Transformation (NST1) was also developed. This document, gives the guidelines on how infrastructure development and services provision commitments are met, such as elaboration of the Transport Sector Strategic Plan to implement transformational transport projects and put in place regulatory frameworks (MININFRA, 2018). However, all of these documents do not identify a list of critical infrastructures to be secured and security management plan. In line with this study, the CI security by PSSPs focus generally on different security of assets, security of industrial products, and the assured safety and security of investors located in KSEZ.

2.6.1. Security of assets and industrial products

Scholars (Besley, Persson, & Sturm, 2010, p.27) argued that "the steadiness of the protection and sustainable security of people and property are the fundamental pillars uphold the progress and the development of the country". The functions fulfilled by the PSSPs are stipulated in art.

6 of the Law n° 31/2014 of 19/08/2014. Based on this provision, the PSSPs have a duty to protect critical infrastructures and the people' lives. In this context, the critical infrastructures include broadly the movable or immovable property. In addition, this law requires PSSPs provide advice on maintenance of security or use of security control equipment. However, this law does not provide a list of assets and industrial products to be protected by the PSSPs. However, they should be detailed in the contracts between PSSPs owners and their customers.

2.6.2. Safety and security of investors

As mentioned in subsection above, the PSSPs functions include also protecting investors. In fact, KSEZ was created with intention to boost the economy of Rwanda and attract investors from Rwanda and abroad. As investors play a key role in the development of critical infrastructures and the economic development of the country, there is a need for governments to ensure a safe and secure environment for them. Successful economies are those that have proven a safe and secure environment for doing business (Achtenhagen and Brundin, 2016). In this context, the above mentioned PSSP's functions include obviously the security of investors.

2.6.3. PSSPs training and professionalism

The quality of training and professionalism of employees is important to effective performance and image of the institution. In fact, the competitiveness of PSSPs in business depends on the professionalism and   the quality of the service delivery (Sabelo, 2007). According to (Schouten, 2017), "professionalism and expertise of the PSSPs staff are meaningful and have an impact on the organization returns". At this point of view, (Gill, 2014) noted that within the period of 1950s and 1960s, the majority the people who wanted   in-house security contracted in a big number with Private security companies judged to have specialist security employees.

In fact, the ethics and the code of conduct of the PSSPs focus holistically on three dimensions according to (Ruth and Curt, 2016); on professionalism; compliance with the laws and licensing; and working within the limits set by the law. The conduct requirements are the outcome of training. However, (Martin, 2006) noted that, PSSPs have the sovereign power and window of appreciation of the training to be delivered to their employees. Subsequently, the quality and the

training diverge significantly from one country to another or from one company to another within the country. Some PSSPs train their employee, while others deploy the security guards on duty who have a little basic security provision knowledge such as former military and police officers.

In Rwanda, the law governing PSSPS requires these companies to train their staff for capacity build and acquiring skills before taking up their duties and when it is considered necessary (Law n°31/2014 of 19/08/2014 governing PSSPs, art.13). This law requires the PSSPs to notify the RNP in writing the training venue and calendar, and submitting a list detailing the full identification of trainees within a deadline of 30 days preceding the training according to the above mentioned law. However, the law does not specify who will conduct the trainings, nor the training programs. This chapter reviewed literature on Private security service providers in general and Rwanda particularly. It elaborated on the theoretical review and conceptual framework that guided the study. The chapter also discussed the overview of concept critical infrastructure security, the contribution of PSSPs in securing CIs and types of security operations executed while securing CIs. The next chapter focuses on the research methodology and techniques applied while conducting this study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1. Introduction

This chapter mainly present aspects related to methodological considerations and research design, choice of methods, participants and setting, and data analysis. The research methodology outlines the manner in which the study is conducted. It is all about procedures for obtaining, organizing data, by considering the logic behind using the methods and techniques selected and to give explanation why such research strategy, data collection methods and techniques for data analysis were selected.

3.2. Research design

Researcher such as (Kothari, 2009, p.30) indicates that, "a research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure." Scholars in field of research methodology, Welman and Kruger (2001) suggest different types of research designs used by researchers in social science (quantitative, qualitative, and mixed research designs) and the different criteria to follow when selecting an appropriate research design. These criteria include, according to (Welman and Kruger, 2001, pp. 182-183) "the type of the study under investigation, the financial constraints and time allocated to the research, objectives of the study, and experience of the researcher in conducting the study and the population involved in the study".

According to (Kumar, 2014, p. 155), "the focus of qualitative research is to understand, explain, explore, discovering the clarity of situations, feelings, perceptions, attitudes, values, beliefs and experiences of a group of people". Referring to the general objective of this study which was to assess the contribution of private security service providers in securing critical infrastructures located in Kigali Special Economic Zone, the researcher chose qualitative approach to have a clear understanding on how PSSPs contribute to the security of CIs in KSEZ. The study used a descriptive design method due to its advantage of accurate description and presentation of the situation on ground. In fact, (Orodho, Tromp, 2006, p. 27) argues that, "the descriptive method is the processes of collecting information by interviewing respondents; the researcher was guided by interview guides". Data collection method used in this research was individual interview and

focus group interviews. This method was chosen because of the flexibility allowed to the interviewer in what s/he asks of a respondent is an asset as it can elicit extremely rich information. Interviews provide the researcher with the opportunity to get as much as possible information on the subject matter (Kumar, 2014).

Similarly, unstructured interviews helped the researcher to assess the contribution of PSSP in securing critical infrastructures located in KSEZ, to explore the extent to which PSSPs mobile patrols and static guards contribute to the security of KSEZ, to investigate how monitoring CCTV feeds contribute to the security of KSEZ and to assess the contribution of PSSPs collaboration with other security organs in securing KSEZ.

3.3. Study Population

A population can be defined as all people or items with the characteristic one wish to understand (Saunders, 2007). The targeted population for this study was composed by the following people; private security service providers' owners/managers and personnel, prime economic Zone (PEZ) management (those who manage the Kigali special economic zone), people conducting business in Kigali special economic zone (owners of factories and warehouses), Rwanda Private Security Industry Association and Rwanda National Police (RNP) more specifically the department in charge of PSSPs and the district police unit Gasabo that has KSEZ in their area of responsibility.

The above mentioned targeted population was chosen according to their expected contribution to this study. The RNP being regulator of PSSPs and partner, PEZ as an entity that manages KSEZ, owners or managers of PSSPs and security guards as people dealing directly on daily basis with the security issues in the KSEZ, Business owners who are concerned with the security of their assets/personnel and Rwanda Private Security Industry Association (RPSIA) being entity that represents all PSSPs, they were in better position to provide as much as possible information concerning how private security industry protect critical infrastructures in KSEZ.

The numbers of the population in each category are presented in the next table.

Table 1: Study population

SN	Population	Number Population
01	RNP Department for PSSPs	15
02	District Police Unit Gasabo (Bumbogo and Ndera Police STN)	23
03	Manager of Prime Economic Zone	01
04	Member of Rwanda Private Security Industry Association	01
05	Owners of business in KSEZ (industries & warehouses)	99
06	Owners and managers of PSSPs	07
07	Security guards	560
	Total	**706**

3.4. Sample and Sampling techniques

In this study, samples were selected from the categories of the population mentioned above; from owners of the businesses operating in KSEZ, the RNP and from private security industry (PSI). Purposive sampling was used to select people who were able and willing to provide relevant information that helped to achieve the research objectives (Kumar, 2014). Referring to the description of the above mentioned targeted population, the researcher believed that they were having capacities to provide required information that facilitated to understand the whole process on how PSSPs contribute to the security of critical infrastructure located in KSEZ.

Selecting sample size is an important step in the research journey, scholars such as (Onwuegbuzie and Callins, 2007, p. 289) argue that, "sample size in qualitative research should not be so small at the extent of making the researcher difficult to achieve data saturation and at the same time, the sample should not be so large that it is difficult to undertake a deep case-oriented analysis". According to Warren as cited in (Bryman, 2012, p.425) he suggest that "the minimum required sample size for qualitative interviews to be between 20 and 30 respondents".

With regard to this study, the sample size is 28 respondents from the following categories in the next table 2.

Table 2: Simple size

SN	Respondents Category	Sample
01	RNP Department for PSSPs	01
02	District Police Unit Gasabo (Bumbogo and Ndera Police STN)	01
03	Manager of Prime Economic Zone	01
04	Member of Rwanda Private Security Industry Association	01
05	Owners of business in KSEZ (industries & warehouses)	05
06	Owners and managers of PSSPs	04
07	Security guards	15
	Total	28

3.5. Methods for data collection

Methods of data collection has been defined as a trajectory process and procedures followed during the data collection (Keith, 2005). Experts in field of research stated that there is an array of methods used in data collection depending on the type of research design (Maree, 2016). As previously discussed, this study was guided by a qualitative research design. Therefore, this study used qualitative data collection methods (Welman, et al., 2001).

3.5.1. Qualitative methods

Qualitative methods are appreciated by different researchers such as (McMillan &Weyers 2007) as useful and advantageous data collection technique narrating textual information from respondents. In fact, it easily facilitates the communication between the respondents and researchers who are recording the respondents experience and feelings. Generally, this method was recognized in this study due to its flexibility in investigation, and the respondent's familiarity with direct interactive communication through interview which is the main component of qualitative research approach (Lankshear, Michel, 2004).

3.5.2. Data collection procedure and instruments

Data collection procedures should change and adapt to the type of data to be collected (Welman and Kruger, 2001). Accordingly, scholars classified the source of data into two categories: Primary and Secondary data. Primary data are extracted from the field by the researcher while secondary data include the data or information gathered from previous source collected and analysed by other researchers (John, 2012). Based on qualitative research design guiding this study, interviews and focus group discussion were used to collect primary data, while secondary data collection used the library based techniques "consulting the different published documents on the subject under investigation: Books, reports, articles, library, internet" (Ralf, 2010).

3.6. Interview

An interview is a two-way interactive communication between respondents and the researchers bringing out opinions and ideas on the questions asked by the investigator (Kumar, 2014). In this

study, unstructured interviews were conducted with 28 respondents. The interviewees were contacted and the conversation recording was done by taking hand writing notes.

3.7. Focus Group Discussion

A Focus Group Discussion (FGD) is a group of people or audience setting to discuss and give their perceptions and point of view on pre-set themes or topics broken down from the   subject under- investigation (Kitzinger, 2005). This approach was used to collect the primary data from 15 respondents; PSSPs security guards on how they conduct security operations while securing CIs located in KSEZ. Scholars argue that the size of the FGD can be small and they limit the number of respondents of 6 to 8 (Kamberelis, Dimitriadis, 2008), thus, this study used two (2) FGD whereby the first group will be composed by seven (7) respondents and the second was composed by eight (8) respondents.

3.8. Data analysis and interpretation methods

Data analysis methods are a process of filtering row data collected and giving them a logical sequence in order to present significant outcomes and the new perspective on the subject under study (De Vos *et al*, 2011) and (Sharlene, 2010). In connection with this study, library-based research, analytical and synthetic methods were used to analyze and compile research findings report.

3.8.1. Library based analysis method

This method consists of extracting a package of knowledge from different sources previously published on the topic under investigation (Stark and Torrance, 2005; Creswell, 2009).   In context of this study, this method was used to cross - check different literature that helped to enrich the respondent's reports on the role of PSSPs in securing CIs located in KSEZ.

3.8.2. Analytic method

The analytic method also known as an inductive reasoning method focuses on breaking down the units into different constitutive components or different parts (Nell, 2011). As earlier mentioned, this study investigated the role of PSSPs in securing CIs located in KSEZ. Considering this topic

as a unit, it was discussed in three main themes; PSSP security activities(Patrols and static guards), management of access control and CCTV feeds and PSSP'S collaboration with other security organs, formulated basically referring to the specific objectives of this study (to explore the extent to which PSSP mobile patrols and static guards contribute to the security of KSEZ, to investigate how monitoring CCTV feeds contribute to the security of KSEZ and to assess the contribution of PSSP collaboration with other security organs in securing KSEZ). Therefore this method helped the researcher to analyse different research objectives, detailing different formulated interview themes, and adapting them to interviewees' opinions (De Vos *et al*, 2011).

3.8.3. Synthetic method

The synthetic method known as deductive reasoning is an opposite method to analytic method. However, the methods complement each other (Krishnaswamy et al., 2009). With this regard, different interview reports in connection with the different themes mentioned above were organized and summarised for flexible communication and better understanding of the research findings.

Similarly, the deductive reasoning method helped to put together the information collected in order to have a general overview on the role of PSSPs in securing Critical Infrastructures located in KSEZ.

3.9. Data Presentation

The effective presentation of the research findings is an important step in communication with the research beneficiaries. The ways the data are organized and presented facilitate to understand the current and future status stand of the problem under investigation. Generally, the type of the research design and the data collected and analyzed will dictate the type of data presentation to be followed.

This study followed a qualitative research design (Leedy and Ormrod, 2010) and data were collected via interviews (McMillan and Weyers, 2007). Therefore, the research findings reported presented in form of textual direct and indirect quotations. In addition, this procedure was followed by the editing of the identified mistakes in interviews and report writing.

3.10. Validity and Reliability of the study

In academic sphere, some of criticism of any study examines the process that guided the study, which in most of the cases focus on validity, and reliability of the study. The validity of the study is linked to the fairness of instruments in measuring the objective of the study. The main criteria to be based on when determining the validity of any study include accuracy of information, methodology followed, description of the data collection instruments used and the fairness in reporting the research findings (Leedy and Ormrod, 2005). Furthermore, the reliability of the study consists on having the identical results when a researcher tests an instrument several times (Delport and Roestenburg, 2011).

Indeed, different studies suggested different tips necessary to the identification of the validity and reliability of study (Denscombe, 2002). In this study, these criteria include the clarity of the interview guide, honesty and/or trustworthiness in interpretation and reporting of the study findings. Indeed, the methodological procedures, accuracy of source consulted and data collected on the role of PSSPs in the security of CIs located in KSEZ helped this study to be valid and reliable (Descombe, 2002; Creswell, 2009).

3.11. Ethical considerations

Research ethics considerations encompass a broad range of different moral principles expected by different actors involved in one way or another in the study (Strydom, 2011). According to (Babbie, 2007) a series of ethical considerations suggested by different studies include protection of the respondents from harm, dignity and wellbeing of the parties involved in the study. As stressed by authors (Rubin & Babbie, 2005, p. 71), "the researcher has to ensure protection of respondents' right to privacy and demonstrate honesty and professional conduct in reporting".

Indeed, ethical considerations detailed above were highly observed in data process and analysis process. With this regard, the research had the letter authorizing to conduct the study delivered by the college, the interviews and FGD were administered to the respondents who had the willingness and consent to provide useful information on the topic understudy. Moreover, as suggested by scholars (Tina et al.2012; Robyn, 2019) about ethical conduct during the research

process, confidentiality, anonymity, and honesty in reporting the findings were observed in this study.

CHAPTER FOUR: STUDY FINDINGS, ANALYSIS AND INTERPRETATION

4.1. Introduction

This chapter explores the role of Private Security Service Providers in ensuring the security of Critical Infrastructure located in Kigali Special Economic Zone (KSEZ). The study findings presents in this chapter were collected through interviews and focus group discussions held with different respondents. The study findings report is structured in thematic form and is organized in different sections. Different themes are enriched with the literature and the researcher observations in line with the following research pre-set specific objectives:

a. To explore the extent to which Private Security Service Providers (PSSPs) mobile patrols and static guards contribute to the security of KSEZ.

b. To investigate how monitoring Closed-Circuit Television (CCTV) feeds contribute to the security of KSEZ.

c. To assess the contribution of PSSPs collaboration with other security organs in securing KSEZ.

Based on these objectives, the next four themes emerged:

a. Contribution of PSSPs mobile patrols and static guards to the security of KSEZ.

b. Management of access control and CCTV feeds.

c. Private Security Service Providers Collaboration with other security organs.

d. Challenges faced by PSSPs in securing KSEZ.

The study findings development throughout this chapter focuses on thematic summarized hereof and the interviews were carefully assessed in order to maintain an effective comparison of the respondents' opinions and the control of biased information.

4.2. Contribution of PSSPs mobile patrols and static guards to the security of KSEZ

As stated by (Gill, 2014), there are numerous security activities conducted by PSSPs such as Static guard duties, surveillance, patrols, escorting of valuable and dangerous goods (explosives) delivering security consultancy services among others. These security activities differ from one

country to another depending on laws regulating PSSPs in a given country. Thus, this study sought to identify different security activities specifically performed by PSSPs and how they contribute to the security of critical infrastructures (Industries, warehouses and other businesses such as banks) located in KSEZ.

With this regard, most of the interviewees described the security operational activities conducted by PSSPs as follow:

"Our security activities can be classified into five main routine and operational activities: Patrol (foot and vehicle patrols), static guard duties, responding to alarm, manning CCTVs, screening at entrances and reception duties. However, mainly our security activities are static guard duties and patrols, but it all depend on the number of guards as stipulated in the contract between PSSP and customer. Indeed Some areas require conducting patrols to ensure maximum security, but if security guard number is insufficient we limit ourselves on static guard duties only".

In the same line, another interviewee, labelled as interviewee 6, stated that: *"Most of our duties are performed through static guard, and patrols, but the successfulness of our security operations vary depending on number of security guards and logistical equipment we have and deploy."*

During another interview, this information was also reiterated in this way by another interviewee*: "Major security activities conducted by PSSPs in our daily operations are patrols (foot patrol), static guard, and manning CCTV control room. However, we don't' conduct vehicle patrol because our area of responsibility doesn't require this type of patrol".*

One of the respondents in the interview detailed the above mentioned account. He stated that:

" The security operational activities conducted by PSSPs in KSEZ include static guard duties whereby PSSPs security guards are deployed on different posts, control and responding to security alarm and phone calls, conducting patrols aiming at controlling   the security situation inside KSEZ and perimeter. We deploy guards who perform static guard duties and patrols to our different customer's businesses premises; however, we are the only company patrolling

KSEZ areas with 84 security guards which we think support other companies because of the patrols we conduct in the whole zone".

Accounts from the security guards who were interviewed have revealed similar experience. The FGD 1, 2 *reported* that: *"They deployments (patrol, static security guard post) cannot cover the areas of responsibility due to insufficient number of staff on duty, and few equipments they have."*

During the interviews, respondents (PSSPs managers and security guards) highlighted the issue of business owners who feel reluctant to invest in security matters such as hiring a number of guards that is proportional to the size and sensitivity of the business and its whole area. PSSPs managers also acknowledged the fact that security guards work long hours because business owners like to hire small number of security guards, that's why security guard use a lot of energy to cover big areas. This is one of the causes of theft cases happening in KSEZ according PSSPs managers.

In the same context, various accounts from respondents (4 PSSPs) among the 7 operating in KSEZ shared the same observations. Based on these narratives hereof, physical security of the KSEZ depends on effective conduct of patrols and static guard duties. The PSSP responsible to conduct static guard duties and patrols in whole KSEZ premises play a big role in preventing criminals (thieves, intruders or any other threats against KSEZ) to disrupt economic activities in that area.

Other PSSPs also conduct static guard duties and patrols to various customers' businesses, however different reports from respondents revealed that they perform more static guard duties than patrols due to insufficient number of security guards. Normally patrols compliment static guard duties, relying only on static guarding especially for the security of huge factories and other big premises can constitute a security loophole. However, some business owners raised issues of lack of professionalism from some PSSPs.

At this point of view, another respondent also   added other information during the interview through the following statement: *"In our factory, we have recorded a lot of cases of thefts while we have two security companies hired and paid for the protection of our products and our facilities.   We don't know why these companies are ineffective to accomplish their duty concluded in the contract"*.

 In addition to this point, the Commissioner in charge of PSSPs in the RNP also mentioned issues of some PSSPs being much money oriented to the extent of forgetting the welfare of their personnel. On the other hand, during interviews, PSSPs managers mentioned the lack of security consciousness on the side of their customers.

Among the PSSP's security activities in securing KSEZ include the use of CCTVs as earlier mentioned by various respondents. CCTVs play a big role because those who operate control room can feed information regarding what is happening on ground which helps their operations. The next section discusses the way PSSPs handle access control and CCTV room in protecting CIs located in KSEZ.

4.3. Management of access control and CCTV feeds

Nowadays, both public and private security organs use CCTV technology for security purposes such as the surveillance of the area of responsibility. However, there is a need to understand how this technology is operated to achieve security goals (Keval and Sasse, 2008). Manning control rooms (monitoring CCTV feeds) and access control are among PPSPs security operations as mentioned above by respondents. In the same context, this section discusses different respondents' views on how different the management of access control and CCTV feeds contribute to the security of CIs security in KSEZ.

With this regard, during the conduct of the interviews, one of the respondents articulated that:

"*CCTV control rooms recording and analyzing security threat through CCTV footages, manning different security check posts for screening people entering KSEZ premises, and reception duties guiding customers are among our security operations, CCTVs are used as our force multiplier, whenever those who are in control room see any suspicious movements, they immediately call*

their supervisors or colleagues on ground to verify or to handle according to the situation at hand.

In view of that, the RNP commissioner responsible for PSSPs stated that: "*most of PSSPs have the capabilities of handling CCTV and control room especially those operating in KSEZ as it is witnessed during our inspections.*" Similarly, different   respondents appreciated the PSSPs capabilities in terms of handling CCTVs. PSSP have personnel capable to handle CCTV control rooms. The use of these technical means contribute to the security of KSEZ especially while feeding information from CCTV footages to the security personnel on field.   However, as mentioned by different managers of PSSPs during interviews, some of the business owners don't want to invest in security equipments such as CCTV installations in their premises.

Similarly, another interviewee added further that: "The *Security preventive measures applied by PSSPs* (static security guard posts,   patrols, CCTV) *are generally effective to control the people's movements at entrances and exits, and handling the CIs insecurity threats. Nevertheless, there are some challenges such as few security equipment especially searching gadgets and CCTV control room.*"

This observation was commonly shared by different respondents and was expressed as follow: "*Apart from the private security service providers' efforts in providing security to people and critical infrastructures, there should be a shared responsibility to manage people movements at the entrance and exits involving our customers. In fact, some of our customers don't   have CCTV and control rooms and scanners. Because, they don't want to spend money on security installations, and this constitutes our major challenges with regards to the effective monitoring of the premises. Due to these limitations, we have recorded a number of crime cases such as theft committed by workers and intruders from outside.*"

Indeed, different respondents' interviewees' reports described the PSSPs capabilities of personnel and equipments in conducting patrols, manning static security guard duties, operate and control   CCTV security rooms. Patrols and static guarding are conducted with objective to observe, detect and prevent threats with a view to avoid any security threats that can harm the

client either financially or physically. The CCTV control room role is to reinforce the surveillance and records the PSSPs security operations.

Referring to the above discussion, the effectiveness of PSSPs services can be viewed into two perspectives: the capabilities in terms of personnel and equipment, and the way they conduct their operations on the ground for the security of critical infrastructures and the people. The preventive security measures such as the use of CCTVs are relatively effective. However, the PSSPs capabilities in terms of personnel and equipment differs from one company to another and according to some respondents (PSSPs owners and managers) this imbalance is the cause of some insecurity in KSEZ whereby an area poorly guarded constitute a loophole which affects even those areas that are well guarded, there is also the issues of lack of security gadgets and equipment in some business premises.

The next section will discuss the collaboration of PSSPs and other security organs in securing critical infrastructures located in KSEZ.

4.4. Private Security Service Providers collaboration with other security organs

The effectiveness PSSPs business is founded and strengthened by the effective partnership with other security institutions. The partnership of PSSPs and other security organs is an effective framework helping to maintain sustainable CIs security. In this regard, this study attempted to assess the extent to which this partnership between PSSPs and different security institutions contribute to the security of CIs located in KSEZ. In fact, there are many security organs in Rwanda either public or private, however, this study focuses on collaboration between PSSPs and the Rwanda National Police (RNP) due to two main reasons; the RNP has in its mandate the protection of people's lives and their properties which is also done by PSSPs as force multiplier the second reason is that the RNP as regulator of PSSPs has in its attribution the responsibility to license and oversee their operational activities.

According to (Krajnc 2007, p. 48), "The partnership between security institutions involves the trust, commitment, shared goals and mutual benefits which are essential requirements for the successfulness of their operations".

In this perspective, respondents in interviews stated the following in regard to the collaboration between PSSPs and Public Security organs: *"our collaboration with public security organs (RNP, Military and RIB) is good, the RNP supervise our activities, sometimes we report to the RNP and receive the guidance from them. In fact, we appreciate the partnership between us and the RNP but also the collaboration between PSSPs operating in KSEZ is very effective due to the fact that we operate in the same area and we share almost the same challenges"*.

The interviewees further stated that*: "We are seven PSSPs operating in KSEZ; we complementally support each other in our daily activities. We share information on security incidents likely to occur or happened. In case our security guards on duty want a reinforcement or intervention, they can call to the company control room or supervisor or use alarm, they can call directly to any close public security organs member either police officer or military personnel"*.

This point of view was also reflected in different interviews held with the PSSPs Owners hired to protect KSEZ critical infrastructures. In the same context, Rwanda Private security industry Association (RPSIA) confirmed also the fresh collaboration between PSSPs and other security institutions. In the same line the interviewee named 3 stated: "*The collaboration between PSSPs is good. We work very closely especially with Police, when we need their intervention or in case we need them to come and take suspects that we apprehend while performing our routine duties"*.

 Equally, another interviewee reiterated this information and stated that: "*We have good collaboration and because we patrol the whole premises we use to apprehend thieves that steal from the factories and communicate to security companies that are responsible for the security of those factories. The security related information is shared with other Private security service providers. Furthermore, we collaborate with Police through regular meeting with Police and the use platforms like e-mails and what's app group chat where daily and weekly security situation reports are submitted."*

 According to Rwanda National Police (RNP), the Commissioner in charge for PSSPs stated that:

"The *RNP appreciates the contribution of PSSP's as force multiplier in securing critical infrastructures. Briefly, they play a very big role because Police cannot cover the security of all critical infrastructures. In fact, we have seventeen Private Security Service providers legally operating in Rwanda. Among them*, *fifteen are registered as business companies and two as cooperatives.*

In addition, the Commissioner further highlighted that: "*Generally, the RNP control PSSP service delivery through regular inspections in different deployments of PSSP whereby police officers use inspection sheet and record the situation on the ground. This inspection sheet is signed by both the security guards and customer, and a copy of the inspection sheet is filed in the PSSPs records kept in RNP. These regular inspections make PSSP not to take service delivery for granted and through the inspection we take opportunity to advise them how to improve their service delivery*".

In provision of the article 15 of the law n°31/2014 of 19/08/2014 governing PSSPs, they have a duty to collaborate with Rwanda National Police. In this context, different interview reports above indicated that the partnership between PSSPs and Police is effective. This collaboration extends to issuing and getting licenses authorizing the PSSPs to engage in security operations, sharing information and advices, reporting the security situations, reinforcement security interventions where needed and training of personnel.

In reference to pre-set specific objective number three, the researcher intended to assess the contribution of PSSP collaboration with other security organs (like Police, RIB and military) in securing KSEZ which was found satisfactory according to various respondents. However, the researcher assessed that there is a great collaboration between PSSPs themselves not only public security organs. They support each other in the course of their routine operations.

Beside the good collaboration mentioned in preceding section, the interview reports have identified different challenges affecting the PSSPs security operations. Equally, the next section is subjected to detail the different challenges preventing the effectiveness of private security companies' capabilities and the entire security operations.

4.5. Challenges faced by PSSPs in securing KSEZ

The literature and interview reports discovered the role of PSSPs in securing critical infrastructures. However, the respondents pointed out some challenges disrupting PSSPs to effectively perform their duties. Thus, this section outlines these limitations and suggestions. The main constraints highlighted can be classified into seven categories: (1) challenges linked to the logistical equipments, (2) challenges in connection with the number of personnel (security guards) and welfare, (3) challenges related to recruitment, training and professionalism, (4) insufficient number of females security guards during the recruitment and deployment of personnel, (5) challenge connected to personnel data base management and communication between Private Security Companies, (6) challenges related to the service delivery, (7) the nature of area to be secured and security threat vulnerability of the terrain or field of security operation.

The respondents' opinions on the challenges falling in first categories (logistical equipment) and the second categories (number security guards) displayed that they are not sufficient and this create a gap to effectiveness of PSSPs security operations (failure of incident prevention, poor deployment of security guards, and failure to timely response to incidents).

At this point of view, another respondent, labelled as interviewee 2 expressed that: *"some PSSPs lack adequate equipment such as searching gadgets and also deploy small number of security guards compare to the area of responsibility"*.

Most of the interviewees observed the above-mentioned constraints in the same perspective and asserted that:

"We receive a big number of people in KSEZ (Customers, workers, casual workers on different sites, etc.) compared to the number of security guards who have to serve them. We have inadequate security equipment or sometimes no equipment at all especially equipment for search (metal-detectors, scanner machines) at the entrances, access control challenges due to few numbers of security guards and equipment, intrusion targeting to steal industrial equip and finished products.".

Rwanda National Police Leadership confirmed this information and identified this challenge of insufficient capabilities in terms of personnel and lack of security equipment as a common problem affecting PSSPs security operations in Rwanda.

In line with welfare, interviews and FGD reports from PSSPs revealed that security guards' salaries are low and different from one company to another. As a result, this affects the employees' motivation and professionalism. In details, one of the respondents in the interview described this challenge as follows: *"Security guards from different PSSPs have different salaries; one security guard can be paid a doubled salary compared to a security guard from another company, while they are both operating in KSEZ. We suspect that those who are poorly paid are the ones who are accomplices cooperating with the thieves for their survival".*

The RNP Commissioner for PSSPs also as earlier mentioned, stressed that: *"PSSP owners tend to be more business oriented whereby they want to maximize their profit by paying very little money to the security guards".*

Furthermore, different interviews have reported the challenges related to recruitment, training and professionalism of employees and the service delivery in different PSSPs operating in KSEZ. At this point of view, respondents in various interviews narrated that:

"*Trainings and level of education are different from one company to another, for example in our company, we don't hire anyone who doesn't have at least senior six level of education and we train them prior to the start of security duties for a period of one month. I think these discrepancies can constitute the cause of poor service delivery, this situation can affect not only clients but also other PSSPs because once one side is poorly guarded it can affect the other side guarded by another company".*

Furthermore, the RNP commissioner for PSSPs argued that: *"Sometimes PSSPs hire people with no security background and they don't even train them before using them in security operations and also the lack of security equipment, all these challenges contribute to poor service delivery of some PSSPs*".

He mentioned that this happens especially when they have contracts that require a big number of security guards, they tend to mix those who are trained the untrained ones.

Indeed, the literature shows that in many countries, the lack of proper standards, training and educational preparedness result in the shortage of skilled and competent security officers (Nemeth, 2012). Some of PSSPs top managers are unwilling to invest in training of their security personnel because of the budget involved. However, the untrained security personnel may be a direct threat to themselves, to the company and the client (Hess, 2009).

Through different interviews from respondents, they highlighted the issue of small number of females during the recruitment and deployment of personnel as critical as it hampers the PSSPs security operations and the service delivery as follows: *"some PSSPs have insufficient number of female security guards; some of premises are guarded only by male security guards and become a big challenge when it comes to search females entering the premises"*.

In addition, the interview reports disclosed the challenge of not having a centralized data base that help to manage PSSPs personnel issues and communication between Security Companies. In view of that, respondents explained that: *"There is a need for background check before hiring security guards. PSSPs don't have centralized data base that can help to exchange information, that's why a company can fire a security guard for gross misconduct or criminal conduct and that particular guard get hired by another PSSP"*.

There is also another challenge with regard to customer behaviour on security issues, some of the respondents (PSSPs managers) during the interviews revealed that some customers don't want to listen to security assessment reports done by PSSPs. They stated that: *There is a need for mindset change on the side of customers, whenever a PSSP does a security assessment and proposes to the client security measures, most of the time customers don't value our security advice due to the expenses connected."*

Security assessment is essential as it help to measure the security posture of an organization. The security posture is the way security is designed and implemented to identify weaknesses and vulnerabilities of a facility (Collier & Lakoff, 2008).

Lastly, interviewees reported that the current security loopholes mentioned above make the PSSPs work difficult and might make critical infrastructures in KSEZ vulnerable to insecurity threats. They have mentioned that the failure to fence the compound prevent PSSPs security guards to effectively monitor and control inward and outward movements of the people. This may facilitate opportunist criminals and any other person with bad intentions to disrupt business environment in KSEZ.

Accordingly, the interviewee identified by the number 7 stated that: " *KSEZ is poorly fenced, a lot of thieves are attracted by activities in KSEZ, few number of security guards because customers don't like to hire big number of security, in most cases we guard big premises with few number of guards. The big challenge is during the night when intruders come from all over trying to take industrial products and other valuables".*

In view of the above statement, another interviewee also has mentioned issues related to the security of the perimeter of KSEZ as follows: "*We face the lack of security lights around the KSEZ perimeter, darkness during the night because there isn't a road surrounding the KSEZ perimeter. Subsequently, people from the KSEZ neighbourhood (Ndera & Bumbogo sectors) are favored with this challenge and cross KSEZ premises after cutting fence and also this situation facilitate intruders to come inside to steal different properties".*

In fact, the PSSPs poor working conditions and other challenges with regards to the security of critical infrastructure, can interfere with the security of the KSEZ, therefore, the economy also can be affected.

CHAPTER FIVE: SUMMARY OF THE FINDINGS, DISCUSSIONS, CONCLUSION

5.1 Introduction

This study explored the role of Private Security Service Providers in securing Critical Infrastructure (CI) located in Kigali Special Economic Zone (KSEZ). In this context, this chapter summarizes key research findings, conclusions and also offers some recommendations to remedy the highlighted challenges

5.2. Summary of Key Findings

The study findings confirmed that among the Private Security Service Providers (PSSPs) operations in securing CIs in KSEZ include static guard duties and mobile patrols. However, while performing these security activities, PSSPs use more static guard duties than patrols even where patrols are performed, they don't reach all critical areas for the following reasons:

Insufficient number of PSSPs security personnel which make them to limit themselves on static guard duties.

During the interviews the PSSP responsible for deployment of static guard and conducting patrols in the whole KSEZ area mentioned that the lack of road surrounding KSEZ prevent them to conduct vehicle patrols around the KSEZ perimeter to prevent criminals and intruders penetrating through the fence.

The study also investigated the contribution of the management of access control and CCTV feeds to the security of KSEZ. Finding indicated that most of PSSP have the capacity and capabilities to handle access control (at entrances and exits) and CCTV control room. The study confirmed that, where screening equipment and CCTVs are available, they contribute to the security of CIs in KSEZ because they easy the work of security guards, for example CCTVs serve as force multiplier in terms of surveillance of the area of responsibility. However, some of the business facilities lack screening equipment such as scanners and searching gadgets and CCTV installations.

Generally, the security of CIs is the primary responsibility of Public security Organs especially the RNP, however as it was indicated by the RNP through the commissioner in charge of PSSPs, the growth of private security industry is an advantage to public security institutions, because the they cover areas that were supposed to be covered by Police or by other Public Security Organ. So, PSSPs serve as force multiplier,

 The study findings confirmed the Collaboration between PSSPs and other security organs. PSSPs Owners, Rwanda Private security industry Association (RPSIA) and the RNP confirmed this collaboration during different interviews. The collaboration is based on mutual support during their security operations, technical advice, supervision and training. Even though the researcher intended to assess the collaboration between PSSPs and public security organs, the findings revealed a great collaboration between PSSPs themselves. The findings indicate that this collaboration contribute to security of CIs in KSEZ. Lastly, the study has finds out some of the challenges causing poor performance of the PSSPs in the provision of the security of CIs in KSEZ. The lack of security equipment and installations such as scanners, searching gadgets and CCTV installations were among the challenges creating gaps in the conduct of security operations like access control and surveillance of the area of responsibility as it was narrated by respondents. Insufficient number of personnel (security guards) compare to the area to be secured was mentioned as another challenge in providing the security of KSEZ during interviews. Misunderstanding between PSSPs and business owners on the number of guards to be deployed was highlighted by respondents as one of the major challenges in securing CIs in KSEZ which may lead to the failure of securing effectively the KSEZ. Issue of PSSPs personnel poor welfare (little salary and long working hours), poor recruitment and poor quality of training of security personnel were raised among the causes of poor performance of PSSP personnel in securing CIs. Insufficient number of female security guards during the recruitment and deployment of security personnel was mentioned as challenge especially while executing the task of body search at the entrances as females entering the premises have to be searched by female security guards. The lack of PSSPs centralized personnel data base which can help to identify personnel with bad records in order to avoid hiring them. Lastly the location of KSEZ and the surrounding areas was highlighted as a challenge to the PSSPs providing the security of KSEZ.

5.3. Conclusion

The researcher's interest in conducting this study was to assess the contribution of PSSPs in securing CIs located in KSEZ. According to the findings, this contribution was generally assessed positively by various respondents. Also, the empirical study allowed the researcher to get direct information from the right people for better understanding on how CIs are protected in KSEZ. The Business Owners, the Prime Economic Zone (the management of KSEZ) and the RNP acknowledge the contribution of PSSPs security operations in securing people and critical infrastructures, it is also important to mention that PSSPs are the only security providers securing the KSEZ. However, during the conduct of the research, some issues that need to be addressed for the improvement of security services provided by PSSPs in securing these CIs especially in KSEZ were highlighted.

Based on the findings of the study, with regard to the conduct of patrols and static guard duties, it was found that some of PSSP managers do not deploy enough staff because business owners prefer to hire few security guards because of the connected expenses. This is one of the causes of theft incidents that occur at KSEZ because; the small number of security guards cannot cover certain places which are larger compare to the small number of security guards deployed.

The lack of road surrounding KSEZ also prevent the conduct of vehicle patrol around the perimeter, this kind of patrol can permit PSSPs to prevent criminals and intruders to access the KSEZ premises illegally. Normally KSEZ is well designed with sufficient road networks facilitating movement flow inside. However, they omitted the road surrounding the area which can serve as boundary between KSEZ and neighbouring areas (Bumbogo and Ndera sectors).

The two existing official entrances at KSEZ (one is located near the road Rwamagana – Kigali City and the second entrance is located at the side of Bumbogo closer to the road Kimironko-Bumbogo) these roads are not the solution to prevent illegal entries. There are a lot of illegal entrances and exits created by criminals and people living in the neighbourhood who cross KSEZ as a shortcut. The lack of security lights around the perimeter of KSEZ also contribute to the illegal entry at KSEZ during the night and make hard the work of security guards on static guards duties and patrols.

Research findings also indicate that, insufficient security equipment such as CCTV installations and searching gadgets and little number of female security guards constitute a challenge with regard to the access control and monitoring the areas. As indicated by respondents, female entering some places go unsearched if there is no female security guard present, this habit of improper screening at the entrances of sensitive facilities can jeopardize the whole security of the KSEZ.

5.4 Recommendations

The research study presents a number of recommendations and suggestions based on the findings. The recommendations suggest how PSSPs can improve their security operations in securing CIs especially those located in KSEZ. The study made the following recommendations and suggestions to the RNP, the Prime Economic Zone management, Rwanda Private Security Industry Association and PSSPs managers/owners.

5.4.1 Recommendations to Rwanda National Police

Rwanda National Police as regulator and an institution overseeing the PSSPs operating in Rwanda, a continued engagement of PSSPs in terms of professionalism, improving security personnel welfare is recommended. There is also a need to have one Standard operating procedure (SOP) regulating PSSPs security activities, currently each PSSPs has its own SOP, the reason for this recommendation is that the current law regulating PSSPs security activities doesn't details all technical issues, a single SOP for all PSSPs can attempt to minimize existing gaps in PSSP's service delivery and the conduct of security operations.

5.4.2 Recommendations to Prime Economic Zone management

Prime Economic Zone, as a company managing the KSEZ, in order to minimize the security breaches, it is recommended to properly fence the KSEZ surroundings, to install security lights around the perimeter fence and to construct a road surrounding the area as it has been proved to contribute to the security (example of the road surrounding Kigali International airport). As it was mentioned earlier security personnel can use the road to conduct vehicle patrols. It is also

necessary to encourage their customers (KSEZ business operators) to have minimum security equipment that complement the PSSPs efforts in providing the security of their businesses.

5.4.3 Rwanda Private Security Industry Association

Rwanda Private Security Industry Association plays a great role in coordinating PSSPs, it is recommended to put in place a centralized personnel data base that can help members not to hire security personnel who were fired by other companies for gross misconduct. It is also recommended to conduct internal audits on quality service delivery, not leaving this responsibility to the RNP only. The outcome of those audits can serve as a way of sharing best practices or as a way of drawing lessons.

5.4.4 PSSPs managers/owners

PSSPs security operations in securing CIs located in KSEZ are generally appreciated by the beneficiaries and the regulator. However it is recommended to adhere to the rules and regulations and standards set by themselves in their respective SOPs with regards to the employment (having standardized recruitment and training programs, respect of gender principles, and improving the personnel welfare) and improve the quality of service and service delivery.

5.5 Suggestions for further Research

The researcher suggests further research on in relation to the following questions:

a. How PSSPs security personnel welfare contribute to the service delivery?
b. At what extent the PSSPs security personnel training affect security operations?
c. And lastly to assess the effectiveness of policies framework regulating critical infrastructures security plan in Rwanda.

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APPENDICES

Interview guide for the Police Commissioner for Private Security Service Providers

(C/PSSPs)

I am Eric MURENZI, a student at University of Rwanda (UR) conducting a research on *Critical Infrastructure Security and the Role of Private Security Service Providers: case study of Kigali Special Economic Zone (KSEZ),* as a requirement for the award of a Masters Degree in **Peace Studies and Conflict Transformation**, I kindly request you to respond to the different questions in relation to the topic mentioned above. The information given will be used for academic purposes only and will be treated with utmost confidentiality.

1. Who is responsible for the security of KSEZ?
2. How do they ensure the security of Critical Infrastructure in KSEZ?
3. Have you ever received any complaints in relation to the security of KSEZ?
4. What are the capabilities of PSSPs in operating CCTV in security perspective?
5. What are the mechanisms used by RNP to control the PSSPs service delivery, and professionalism?
6. How PSSPs collaborate with other security organs, particularly RNP in protection of Critical infrastructures?
7. What are the challenges the RNP has in managing PSSPs?
8. What guidance should be suggested to PSSPs helping them to effectively accomplish their functions particularly in securing critical infrastructure located in KSEZ?

Thank you

District Police Commander, Gasabo

I am Eric MURENZI, a student at University of Rwanda (UR) conducting a research on *Critical Infrastructure Security and the Role of Private Security Service Providers: case study of Kigali Special Economic Zone (KSEZ),* as a requirement for the award of a Masters Degree in **Peace Studies and Conflict Transformation**, I kindly request you to respond to the different questions in relation to the topic mentioned above. The information given will be used for academic purposes only and will be treated with utmost confidentiality.

1. What kind of security issues do you face from KSEZ?
2. How is the collaboration between your Unit and PSSPs operating in KSEZ in securing critical infrastructures and people' lives?
3. How do you think about the PSSPs capabilities with regards to the security of critical infrastructure more particularly those located in KSEZ?
4. How do you communicate with PSSPs in case they need any Police intervention or technical advice?
5. How do you evaluate PSSP's employee's professionalism and service delivery in protection of personnel and critical infrastructure?
6. What are the challenges obstructing the PSSPs to effectively perform their duties and responsibilities?
7. Are there any cases of insecurity in KSEZ?
8. What are the suggestions and recommendation should help the PSSPs to accomplish their duties effectively?

Thank you

PSSPs Owners/managers

I am Eric MURENZI, a student at University of Rwanda (UR) conducting a research on *Critical Infrastructure Security and the Role of Private Security Service Providers: case study of Kigali Special Economic Zone (KSEZ),* as a requirement for the award of a Masters Degree in **Peace Studies and Conflict Transformation**, I kindly request you to respond to the different questions in relation to the topic mentioned above. The information given will be used for academic purposes only and will be treated with utmost confidentiality.

1. What are the security activities do you perform while executing your responsibilities?
2. What are the security challenges that you face in KSEZ?
3. How do you collaborate with other security organs?
4. How do you perform foot patrols and static guards in securing KSEZ?
5. How do you operate CCTV in ensuring security of KSEZ?
6. What challenges do you face while performing your duties and responsibilities?
7. What are the suggestions and recommendations should you address to the RNP, KSEZ leadership other authorities that can help you to effectively fulfil your duties and responsibilities?

Thank you

Security Guards

I am Eric MURENZI, a student at University of Rwanda (UR) conducting a research on *Critical Infrastructure Security and the Role of Private Security Service Providers: case study of Kigali Special Economic Zone (KSEZ),* as a requirement for the award of a Masters Degree in **Peace Studies and Conflict Transformation**, I kindly request you to respond to the different questions in relation to the topic mentioned above. The information given will be used for academic purposes only and will be treated with utmost confidentiality.

1. Before starting this job, have you been trained by your company?
2. Have you received any additional training so far?
3. How long have you been in security business?
4. Before going to your respective duties, do you receive any briefings on what you supposed to do and what you are supposed to secure?
5. Do you receive any scope and status of items to be taken care of prior starting your shift on work?
6. In case of incidents how do you reports to your hierarchy and how do you collaborate with other security organs?
7. How do you perform foot patrols and static guards and how are they effective to respond to insecurity in KSEZ?
8. How do you operate CCTV in securing KSEZ?
9. What are the security challenges do you face in general?

Thank you

Rwanda Private security industry Association (RPSIA)

I am Eric MURENZI, a student at University of Rwanda (UR) conducting a research on *Critical Infrastructure Security and the Role of Private Security Service Providers: case study of Kigali Special Economic Zone (KSEZ),* as a requirement for the award of a Masters Degree in **Peace Studies and Conflict Transformation**, I kindly request you to respond to the different questions in relation to the topic mentioned above. The information given will be used for academic purposes only and will be treated with utmost confidentiality.

1. What is the role of PSIA in ensuring the quality of services provided by PSSPs?
2. What is the role of PSIA in providing security at KSEZ?
3. How many PSSPs and the approximate number of personnel operating in the KSEZ?
4. What are the PSSPs operational activities in securing KSEZ?
5. How does the RPSIA evaluate the general performance of the PSSPs operating in KSEZ?
6. How are PSSP capabilities in terms of personnel and equipment?
7. How PSSPs collaborate with different other security organs operating their activities at KSEZ?
8. What are the challenges that face PSSPs to effectively perform their duties and responsibilities?
9. What are the suggestions and recommendation should help the PSSPs to accomplish their duties?

Thank you

The Prime Economic Zone (PEZ) Management

I am Eric MURENZI, a student at University of Rwanda (UR) conducting a research on *Critical Infrastructure Security and the Role of Private Security Service Providers: case study of Kigali Special Economic Zone (KSEZ),* as a requirement for the award of a Masters Degree in **Peace Studies and Conflict Transformation**, I kindly request you to respond to the different questions in relation to the topic mentioned above. The information given will be used for academic purposes only and will be treated with utmost confidentiality.

1. What are the security issues do you encounter in KSEZ?
2. How do you monitor security related issues to ensure the security of KSEZ?
3. How do you appreciate PSSPs services in securing KSEZ critical infrastructures and the people?
4. Do you have any joint security coordination between PEZ management, PSSPs operating in KSEZ and business owners or managers?
5. How PSSPs staff collaborate with different categories of people (Business, customers, etc.) operating their activities at KSEZ?
6. What are the challenges obstructing the PSSPs to effectively perform their duties and responsibilities?
7. What are the suggestions and recommendation should help the PSSPs to accomplish their duties effectively?

Thank you

KSEZ Business Owners (Industries and warehouses)

I am Eric MURENZI, a student at University of Rwanda (UR) conducting a research on *Critical Infrastructure Security and the Role of Private Security Service Providers: case study of Kigali Special Economic Zone (KSEZ),* as a requirement for the award of a Masters Degree in **Peace Studies and Conflict Transformation**, I kindly request you to respond to the different questions in relation to the topic mentioned above. The information given will be used for academic purposes only and will be treated with utmost confidentiality.

1. What is the contracted PSSP responsible for the protection of your personnel, clients and assets and how many security guards do you have?
2. What are the security issues have you experienced since the establishment of your business?
3. How do you evaluate the services offered by PSSPs in your business?
4. How do you appreciate the relationship/ collaboration between PSSPs, Business Owners and customers**?**
5. What are the limitations that hamper the good performance of PSSPs when performing their duties and responsibilities?
6. What are the suggestions and recommendation should support the PSSPs to fulfill their duties?

Thank you