BUSINESS AND INFORMATION STRATEGIC ALIGNMENT OF PROJECT AND PROCUREMENT MANAGEMENT PROCESSES IN THE RAILWAY ORGANISATION IN SOUTH AFRICA

by

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DECLARATION

I, Pamela Malongwe, declare that the contents of this thesis present my own unaided work, and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.

[signature]

… / 02 / 2018

Signed

Date

ABSTRACT

Railway organisations in South Africa are government parastatals. These organisations have embarked on mega modernisation programmes. Project and procurement process alignment is crucial to the successful implementation of such programmes, as the disconnect between the two processes may result in project cost overruns and escalations. Projects in the parastatal organisations are not completed on or executed according to the planned schedules. The two main research questions are stated as follows:

  i)   What factors affect the alignment between procurement and project management processes in the South African railway organisation?
  ii)   How can the parastatal organisation align the procurement and project management processes?

For the research methodology, a subjectivist ontological and interpretivist epistemological stance was followed. The research approach is inductive, with a case study as strategy. Data collection was done on a non-random, purposively selected unit of analysis and observation. Purposive sampling allows the researcher to rely on his or her own judgement when choosing to participate in the study. Participants were selected based on characteristics of a population and the objectives of the study. The participants belong to three departments, namely IT, SCM, and the Project Management Office (Project Managers). These three departments were selected because of their relevance to the study. Interviews were conducted using semi-structured questionnaires. The instrument used was interview guide. Data was analysed by firstly transcribing the interviews. To confirm the correctness of the interviews, the data was validated. Data was further analysed by means of summarising, categorising, and conducting a thematic analysis. Ethical principles were followed in accordance with the policies and procedure of CPUT.

The study revealed that project and procurement process misalignment in the railway sector in South Africa does exists. A detailed discussion of factors contributing to this misalignment are discussed further in chapter five and chapter six is recommendations.

Keywords: Railway sector, project management, strategic alignment, procurement process, business process, information strategy, railway project

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DEDICATION

This thesis is dedicated to my two sons, Buhle and Lwango Malongwe, for allowing me time to be away from them and to study. To my late parents, Mlungisi Harvey and Nobantu Thelma Malongwe, both of whom gave me the foundation of something they had never enjoyed (education); THELMA NOBANTU MALONGWE, you could not witness my success because death defeated you; and to my colleagues at work for encouraging and supporting me.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACRONYMS

Acronym	Description
AG	Auditor General
BP	Business Process
BPM	Business Process Management
BEC	Bid Evaluation Committee
BSC	Bid Specification Committee
CIDB	Construction Industry Development Board
EPIC	Enterprise Project Information Centre
EPMO	Enterprise Project Management Office
ERP	Enterprise Resource Planning
ECSA	Engineering Council of South Africa
GPA	Government Procurement Agency
IMS	Integrated Management System
ISO	International Organisation for Standardisation
IT	Information Technology
IR	Indian Railways
IT	Information and Communications Technology
PP	Procurement process
PM	Project Management
BPMN	Business Process Management Notation
BPMS	Business Process Management System
OCI	Optimised Contractor Involvement
PMBOK	Project Management Body of Knowledge
PMO	Project Management Office
PMP	Project Management Process
PPP	Public-Private Partnership
PRASA	Passenger Rail Agency of South Africa
PFMA	Public Financial Management Act
RFP	Request for Proposal
SA	South Africa
SACPCMP	South African Council for Project and Construction Management Professionals
SAP	Systems Application and Products

Acronym	Description
SCM	Supply Chain Management
SOE	State-Owned Enterprise
SPPM	Strategic Projects and Programmes Management
SRM	Supplier Relationship Management
TFR	Transnet Freight Rail

CHAPTER ONE: INTRODUCTION AND OVERVIEW OF THE STUDY
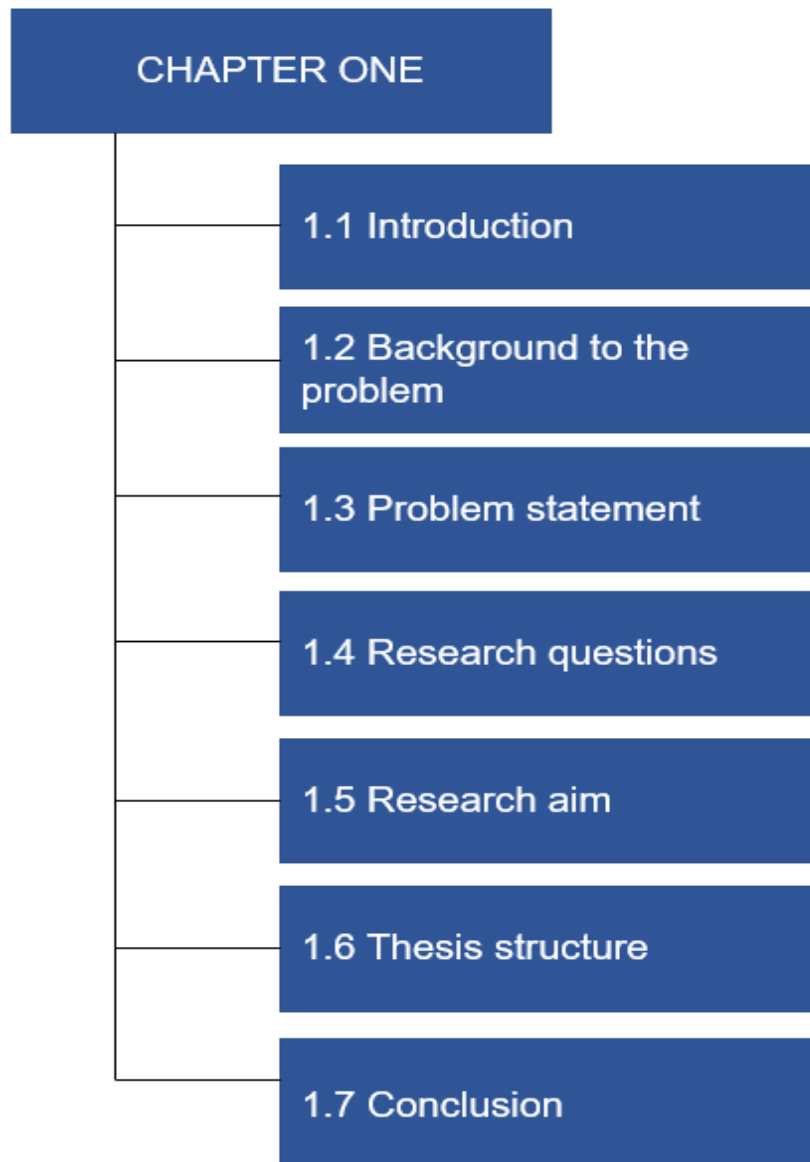
Figure 1.1: Format for Chapter One

1.1 Introduction

Strategic alignment and information technology (IT) are two important elements that are critical to business process management (BPM) (Rosemann & Vom Brocke, 2010). According to Rosemann and vom Brocke (2010:112), strategic alignment is defined as "a tight linkage of organisational priorities and enterprise processes enabling continual and effective action to improve business performance".

Project management (PM) and procurement processes (PPs) are both business processes (BPs). Procurement is part of the supply chain management (SCM)

activities. Trkman (2010:125) defines BPs as a "complete, dynamically coordinated set of activities or logically related tasks that must be performed to deliver value to customers or to fulfil other strategic goals". Rosemann and vom Brocke (2010) argue that the acceptance and usage of BPM remains split and there is little agreement concerning the correct scoping of BPM. Harmon (2010) states that any person who attempts to uphold BP alteration in an actual organisation will recognise that there are many different BP traditions, and that individuals from the different traditions propose different approaches to BP change. A BP structure depends on an organisation's culture. Morrison, Ghose, Dam, Hinge and Hoesch-Klohe (2011) indicate that it is difficult to determine an optimal set of processes that is required for realising strategies. Trkman (2010) emphasises that an acceptance between the business atmosphere and BPs is required. For this to happen, continuous improvement of BP tasks and information systems must exist. A fit or alignment between project management and PPs can be achieved by BP management notation (BPMN) and BP management systems (BPMS). The correct BPM system can increase the productivity, agility, and profitability of a business.

Through IT, strategic alignment between BPs gives direction to a more focused and strategic usage of IT which, in turn, gives direction to an augmented performance (Chan & Reich, 2007). IT on its own does not bring about any competitive advantage, but managers themselves must ensure that they align their core or essential processes enabled by IT to create a competitive advantage. Abbasi, Tarhini and Hassouna (2015) indicate that despite IT investments in organisations, a number of projects are still being reported as failures. A PP is a core BP because it has an impact on many other business processes, especially on project management. Dzuke and Naude (2006) refer to PP as an operational function regardless of its strategic importance, and because it is treated as incidental, service delivery suffers as it results in sub-standard and late delivery of government projects. A good operative supply chain practice and up to date IT may lead to an enhanced business performance (Vickery, Jayaram, Droge & Calantone, 2003; Orozco, Tarhini, Masa & Tarhini, 2015). It is important to incorporate IT in any business decision for a systematic approach.

Railway organisations across the world have developed different procurement strategies for their businesses. National governments face fiscal constraints, resulting in an infrastructure deficit. Kenya has turned to the public to create a Public-Private Partnership (PPP) to close the infrastructure deficit (Ndonye, Anyika & Gongera, 2014). Some railway companies in South Africa are also following a PPP approach in their property development projects. Ndonye et al. (2014) observe that PPPs made

governments change the direct role of the state in the economy to one of organiser, regulator, and controller of economic activities. Hodge and Greve (2014) as well as Hall (2008) note that PPPs are increasingly used to provide public facilities and services, especially by governments in the Western world. The aim of this study is to understand how IT can assist in aligning PPs with project management processes in the railway sector.

Indonesia and India have adopted e-procurement processes (Lewis-Faupel, Neggers, Olken & Pande, 2014). Lewis-Faupel et al. (2014) state that in Indonesia, public works project completion delays have been reduced by e-procurement. In South Africa, there are two railway organisations, namely Transnet Freight Rail (TFR), and Passenger Rail Agency of South Africa (PRASA). They are both government entities using public or government procurement processes. They adhere to the national legislation of the Public Financial Management Act (PFMA) (No.1 of 1999 as amended by Act 29 of 1999).

The South African railway sector, specifically PRASA, is currently busy with a modernisation programme, but there are delays. Munzhedzi (2016) notes that PRASA is in a process of purchasing new locomotives to replace the obsolete ones. According to Hannan and Sutherland (2015) mega projects in South Africa come across a widespread of disapproval with regards to their aspects of their implementation and impacts like time delays. Turok (2016) supports Hannan and Sutherland 2015 by mentioning inflated costs and bogged procurement processes as limitations in the delivery of mega projects in South Africa. Locatelli, Invernizzi and Brookes (2017) argues that large transport infrastructure projects are historically associated with late delivery and over cost overrun. Some of the projects move back from evaluation to retender, and all these processes affect the delivery time and costing. This simply shows the misalignment between project and procurement processes. This study is therefore relevant.

1.2   Background to the problem

Projects in the railway sector of South Africa are faced with delays and disruptions due to misalignment between procurement and project management processes. Milanzi and Barnard (2017) argues that, the misalignment between procurement officials and project officials in South African projects leads to procurement delays and variations. The misalignment between the procurement and project management processes results in project cost overruns and escalations (Flyvbjerg, Holm & Buhl, 2004). Kikwasi (2008) reports that some of the main sources of the delays in construction projects are contractor payment delays, delays in information, funding

challenges, lack of project management skills, compensation matters, and disagreement on the difficulties. Kikwasi recommends that the parties involved in the project procurement processes should focus more on project management skills. For project success, Radujkovic and Sjekavica (2017) illustrates that, project manager does not only have a responsibility of managing cost, time and quality but also to align project management processes with project procurement processes. Same view is also concurred by Reddy (2018) that processes have to be reconciled to truly strategically align the two, business and IT. Mikalef and Batenburg (2014) indicate that IT must be congruent in terms of strategy and business operations. ERP plays an important role in developing and maintaining business processes. In many cases the ERP system forces the business to follow specific processes. This happens especially when there is a lack of business processes.

1.3   Problem statement

Late completion of infrastructure projects is very common worldwide due to the disconnect between procurement and project management processes (Lewis-Faupel et al., 2014). Rahman, Memon and Karim (2013) as well as Ofosu (2014) agree with Lewis-Faupel et al. by stating cost overruns in infrastructure development projects is a general phenomenon. According to Lewis-Faupel et al. (2014), the nature of construction activities is the reason for time and cost overruns in infrastructure projects and this makes the industry susceptible to a high degree of risk.

Lewis-Faupel et al. (2014) further state that projects in the parastatals are not completed on or executed according to planned schedules. Salifu-Asubay and Mensah (2015) support Lewis-Faupel (2014) by stating that infrastructure projects in Ghana have a schedule overrun of between 12 and 24 months. Ghandan and Gupta (2017) is of the view that, the construction industry of today has a poor cost management that result in cost overrun. His study focused in the construction projects in India. Sohu 2018 identified critical factors of cost overrun in Parkistan particularly in Sindh Province. He mentions that political influence should be avoided by the client. The non-alignment of procurement and project management processes leads to unsuccessful project delivery or late delivery (Lewis-Faupel et al., 2014), and it is unclear why organisations do not align procurement and project management processes. Ofosu (2014) states that construction projects through infrastructure development play an important role in any country's economic growth. The misalignment between procurement, project management processes and IT results in incomplete and late delivery of projects. Ali and Beheiry (2015) agree by saying that the late delivery of material caused by bad procurement processes results in

4

contractors experiencing financial losses and time delays. Ibem E O et al. (2018) looked at the role that digital technologies can assist in the procurement of projects in Nigeria. The study revealed the absence of alignment and listed benefits of integration.

1.4 Research questions

This thesis has two research questions and five sub-research questions. Research questions are developed and used to gain important information in order to explore the identified phenomena.

1.4.1 Research question 1 (RQ1) with sub-questions (SRQs)

RQ1: What factors affect the alignment between procurement and project management processes in the South African railway organisation?

SRQ 1.1: What are the procurement processes being used for?

The objective of this question is to establish the current procurement processes that are being used.

Method: This is done by means of interviews, a case study, and semi-structured questionnaires.

SRQ 1.2: What project management processes are being used by the organisation?

The objective of this question is to establish the current project management processes that are being used.

Method: This is done by means of interviews, a case study, and semi-structured questionnaires.

SRQ 1.3: What are the challenges that the organisation experiences with the procurement and project management processes?

The objective of this question is to determine the challenges when implementing and executing procurement and management processes and to investigate the workaround to overcome the challenges.

Method: This is done by means of interviews, a case study, and semi-structured questionnaires.

1.4.2 Research Question 2 (RQ2) and sub-questions (SRQs)

RQ2: How can the parastatal organisation align the procurement and project management processes?

SRQ 2.1: How are the process tasks being performed by the organisation?

The objective of this question is to establish whether there is an existing ERP and how it is aligned with the procurement and project processes.

Method: This is done by means of interviews, a case study, and semi-structured questionnaires.

SRQ 2.2: In the ERP system, is there a capability to integrate business processes?

The objective of this question is to determine how effective the IT function is in supporting the organisation's overall goals at a strategic level.

Method: This is done by means of interviews, a case study, and semi-structured questionnaires.

1.5 Research aim

The aim of the study is to explore the strategic alignment between procurement and project management processes in the railway sector in South Africa with IT assistance.

1.6 Thesis structure

The thesis has six chapters. Each chapter begins with an introduction and ends with a conclusion.

Chapter One: This chapter gives a descriptive explanation or summary of the thesis. Topics that are covered include the introduction, background to the problem, problem statement, research questions, and research aim.

Chapter Two: This chapter summarises, clarifies, and evaluates studies related to this particular area that have already been completed by other researchers. Four topics are argued, namely the procurement process, project management process, business process, and strategic alignment.

Chapter Three: This chapter elaborates on the methodology appropriate for the development of knowledge in the study. It discusses some of the philosophies from the research onion. The research approach and research strategy are explained.

Because the research is a case study, interviews are used as a tool to collect data. For ethical considerations, data are kept confidential.

Chapter Four: This chapter concentrates on analysing the raw data collected up to the development of the findings. Nine (9) themes were developed from 30 findings.

Chapter Five: This chapter discusses the nine themes from the findings and answers the research questions based on the findings derived from the interview data.

Chapter Six: The final chapter presents the conclusion of the thesis. It provides recommendations based on the key findings. The researcher offers a reflection on the study, explains the research contribution and limitations, and identifies further research.

1.7   Conclusion

The above discussion reviews the background to the research problem. It discusses the delays and disruptions in the railway sector in South Africa cited from different sources. Flyvbjerg, Holm & Buhl, 2004 gives main sources of delays in construction projects. Problem statement is discussed. The literature reveals that construction projects in the parastatals are not completed on or executed according to planned schedules. Ali and Beheiry (2015) agree by saying that the late delivery of material caused by bad procurement processes results in contractors experiencing financial losses and time delays. The two thesis research questions and five sub-research questions are discussed. The research aim is explained. Lastly the thesis structure is demonstrated.

The next chapter elaborates on the literature review.

1 CHAPTER TWO: LITERARURE RIVIEW

Figure 2.1: Format for Chapter Two

2.1 Introduction

Railway projects are categorised as construction projects. Construction projects generally are coupled with pressing deadlines and the need for organised procurement planning. The reason why these projects are so different from others is because they tend to produce one prototype. It is customary in construction industries to win projects with the lowest bids (Chen, Wang, Nevo, Jin, Wang & Chow, 2013).

Literature alludes to a number of factors why projects are not completed on time. Rahman et al. (2013) address factors causing time and cost overruns in the infrastructure projects in Malaysia. Some of these factors include poor project management processes, lack of appropriate software, and poor payment of completed work by contractors. According to Bourn (2005), one of the problems that

affect many failing projects in the United Kingdom is the failure to fully implement best practice procurement and project management. More than three quarters of construction projects in India are not completed according to the scheduled time, while 95% of projects and more than half of the consultancy projects in Indonesia are also not completed on time (Lewis-Faupel et al., 2014).

2.2 Procurement process

Organisations are under pressure to become more responsive in the way they perform their organisational operations, fasten their innovation process, and supply products in a shorter time while at the same time reducing cost. Effective SCM activities, including procurement processes, are considered as a top priority in shortening the time while at the same time reducing costs (Mikalef & Batenburg, 2014). Academics have developed particular interest in the potential of using IT in the field of SCM. Most efforts specifically concentrate on technology usage to support the procurement processes, which is considered the basis of SCM. There have been a number of arguments on the benefits of e-procurement systems, such as procurement costs that are reduced, higher quality of acquired goods, delivery times that are shorter, and better relations with suppliers, among others. Ibem and Laryea (2015) argues that e-procurement is in use in the South African construction industry but unreliable IT infrastructure and security remain a concern. Authors argues that, in order to accelerate the use of e-procurement in South African construction industry there is a need to upgrade IT infrastructure. For any performance gains in any process to be realised, IT must be aligned with operations and organisational strategy. Studies investigating the post-adoption conditions that facilitate performance gain in the SCM domain are still limited, meaning there is still a gap (Mikalef, Pateli, Batenburg & Van de Wetering, 2013).

Several procurement strategies have been used by railway organisations globally, continentally, and in South Africa. Some strategies are common, for instance public private partnerships (PPPs), but the difference is that delivery is not the same in relevant countries. One commonality among all these strategies is that they are being governed by legislation. According to Munzhedzi (2016) the South African procurement legislative frameworks are: Constitution of the Republic of South Africa of 1996, Public Finance Management Act, 1999, Municipal Finance Management Act, 2003, Prevention and Combating of Corrupt Activities Act, 2004, Prevention and Combating of Corrupt Activities Act, 2004, Public Service Act, 1994 and Public Service Regulations of 2001.

The World Bank (2009) defines a concession PPP as an arrangement where the public sector or public authorities grant a private party the permission to design, build, finance, and operate an infrastructure asset owned by the government sector. Kenya, like most other countries, has increasingly turned to PPP to cover an infrastructure gap (Ndonye et al., 2014). PPP in the rail organisation in South Africa presents huge challenges and complexities (Ittmann 2017). Ittmann 2017 is of the view that, the legislative framework must first be in place. At the moment the railway organisation in South Africa can only benefit from successfully negotiated and implemented PPPs.

The first phase of the 77 km long Gautrain Rapid Rail Link in Gauteng that was completed in 2010 is an example of a PPP railway project in South Africa. In September 2006, the Gauteng Provincial Government awarded the ZAR25 billion (£1 billion) project to the Bombela Concession Company on a PPP basis, with the concessionaire obliged to design, build, commission, partly finance, operate and maintain the Gautrain System for 15 years following delivery of the full system (Calitz & Fourie, 2010). Itmann 2017 supports Calitz and Fourie 2010 by illustrating that, in the Gautrain rail infrastructure project in South Africa PPP approach was used.

PPP is mostly used by governments to close the infrastructure gap. During the Crossrail project—a new railway line traversing London—an innovation strategy was created and implemented, as the desire to encourage suppliers to contribute innovations existed from the start of the project, before the creation of the Crossrail innovation strategy (Dodgson, Gann, Macaulay & Davies, 2015). For example, Crossrail developed a unique procurement approach called "Optimised Contractor Involvement" (OCI). In this approach, each individual contractor or supplier can come up with new thoughts or ideas, innovations and practices to the project while sharing the risks and rewards. OCI was established to decrease the risks of procurement in a project while exploiting innovative opportunities to improve performance. The purpose of the innovation strategy at Crossrail is to realise the project's overall vision and goals of creating a number one railway in the world while meeting targets on time and in terms of cost, quality, and safety.

India and Indonesia are regarded as two of the fast-growing economies, using regional and time variation in the approval of e-procurement. Indonesia adopted e-procurement in 2004. E-procurement involves the usage of the Internet for some or all of the processes of purchasing goods and/or services. To increase or enhance procurement process performance, Indian Railways (IR) has embarked on e-procurement to advance efficiency. IR is the world's second largest rail network and Asia's largest rail network under one management. All the procurement processes in

IR form a major part of the materials management activities, as it has adopted well-established procedures, policy guidelines, and practices (Lewis-Faupel et al., 2014). As with any electronic system, adopting an e-procurement solution could significantly save money, time and labour resources that are normally misused.

2.3 Project management process

PM is a regarded as a well-recognised discipline in the field of business management (Hubbard & Bolles, 2014). According to Lappe and Spang (2014), the current infrastructure project management delivery system in Germany is characterised by its traditional nature in which the processes of design and construction are sequential. The design is first, and the main contractor follows. Germany is regarded as one of the biggest and most advanced transportation systems in the world, according to Lappe and Spang (2014).

Hubbard and Bolles (2014:2) suggest that as "more enterprise-wide project management offices (PMOs) are created, more projects will be aligned with the business goals of the organisation, and project management will be executed more strategically". Approaches to grasping strategic results and benefits always involves implementation of potential projects (Stretton 2017). The authors suggest that the executive management must lead in the implementation of a project on a wider enterprise basis or in the implementation of a PMO. According to Pemsel and Wiewiora (2013) PMO is expected to provide uniformity in project management processes, certification and training of project managers. PMO can be instrumental in aligning project management processes with procurement processes through their monthly project management forums. Pemsel and Wiewiora (2013) notes that during these forums project managers presents challenge they encounter in their projects. Silva, Palacios and Varajao 2017 argues that the correct implementation of project management processes best practice lower the project cost overrun and improve project quality.

2.4 Business process

According to Strnadl (2006), a business process is a complete, synchronised set of activities or tasks that are related logically, and that must be executed to provide value to customers or to fulfil other strategic goals of an organisation. In his study, Trkman (2010) suggests that a company should align its business processes carefully with the support of good IT applications as a tool to its environment and the guarantee of continuous adaptation of its essential processes such as procurement and project management processes. Trkman continues by saying IT should be considered as a tool to support the improved processes. Prajogo (2016) support Trkman by saying,

technologies together with business processes contribute towards the improved business performance through cost savings. The scope of the study includes project and procurement management business processes and it involves process activities from the planning phase.

2.5 Strategic alignment

According to Ullah and Lai (2014), the concept of alignment first appeared in the early 1970s. Most alignment studies focus on IT and business processes as a collective through BPM. Chan and Reich (2007) state that in early studies business and IT alignment is often referred as an alignment between a business plan and an IT plan. Rahimi, Møller and Hvam (2014) conducted an alignment study between business process governance and IT governance. This study is the result of an observation that IT governance and business process governance is still limited. Mikalef and Batenburg (2014) examined the alignment between IT and the procurement domain as part of SCM functions. The main focus of the study is on the usage of IT to assist the procurement processes. Rahrovani, Kermanshah and Pinsonneault (2014) researched IT project portfolio alignment. Little research has been done on the alignment of IT, procurement, and project processes.

The aim of this study is to explore and understand the relationship between the strategic alignment of IT, procurement, and project management processes.

2.6 PMBOK

PMBOK stands for Project Management Body of Knowledge and it is the entire collection of processes, best practices, terminologies, and guidelines that are accepted as standards within the project management industry. Meza and Tost (2017) notes that PMBOK standard from the Project Management Institute (PMI) was founded in 1969 and its 5th edition was published in 2013. According to the literature PMBOK, in its 5th edition (2013) with five process groups and 10 knowledge areas. The 10 knowledge areas are integration, scope, time, costs, quality, human resources, communications, risks, procurement, and stakeholders. The five process groups are initiating, planning, executing, monitoring and controlling, and closing (Meza et al. 2017). Varajao et al. (2017) supports Meza et al. 2017.

According to Goncalves, Drumond and Mexas (2016) organisations including government entities are not delivering projects on time and on budget. It can make a great sense for PRASA to adopt PMBOK as a standard and methodology for project management application since the organisation is faced with late delivery of projects

in the modernisation programme. This is in spite of the existence of the professional bodies like PMI, IPMA and APM that develops standards for project management.

2.7 ISO

ISO means International Organization for Standardization and is a worldwide federation of national standards bodies (ISO member bodies). Vajarao et al. (2017) notes that ISO 21500:2012 is aligned with PMBOK 5. Rehacek (2017) supports Vajarao (2017). Rahacek argues that ISO 21500:2012 is based on PMBOK Fourth Edition. PMBOK 5 (A Guide to the Project Management Body of Knowledge – Fifth Edition). ISO 21500:2012 provides guidance for project management in private and public institutions.

ISO 9001 addresses various aspects of quality management. According to Neyestani and Juanzon (2017) there is still a debate amongst the researchers around the world on the usefulness of ISO 9001 in the construction projects. South Africa's Construction Industry Development Board (CIDB, 2017) also maintains different standards in the construction industry for quality management systems. Literature regard ISO 9001 as a benefit in improving internal business processes therefore the implementation of ISO can also be useful in aligning project and procurement processes at PRASA.

ISO 9001 launched a new ISO 9001:2015 standard on the 15th September 2015 (Fonseca and Domingues 2016). This is a review of ISO 9001:2008 standard. One of the major change where PRASA can benefit from this standard is the reinforcement of process approach of project and procurement processes.

2.8 SAP ERP

SAP is the acronym for systems, applications and products. Essential business processes such as project management and supply chain management interact with SAP ERP. Eroshkin, Koryagin, Kovkov, Panov and Sukhorukov (2017) illustrate that, aligning a business process with SAP is a strategic concept. Chimusoro, Fourie, Chimusoro, Twala and Tshabalala (2017) confirms that SAP ERP is implemented in the railway organisation that is a case study for this research paper. Even so, the organisation is still experiencing project delays. According to Armard and Roger (2017) illustrates that SAP ERP is designed to align corporate activities in an organisation and the advantage of that is the improvement of internal business processes. Therefore, alignment of project and procurement processes with SAP might be required. Chimusoro et al. concludes by saying, there is a great need to

improve SCM processes and that will reduce the operational challenges faced by passenger rail transport in South Africa.

2.9 Conclusion

The above discussion reviews a range of previous research work that has been conducted by different researchers. This literature review focuses particularly on strategic alignment, project and procurement processes, as well as business processes. This research study is focusing on these processes, specifically in the railway organisation. The literature shows that the study of business process alignment has been in existence as early as the 1970s, where the focus has been more on aligning one business process with IT. Mikalef and Batenburg (2014) examined the alignment between IT and the procurement domain as part of the SCM function. Little research has been done on the alignment of procurement and project processes, with IT as an enabler of these two business processes.

The next chapter elaborates on the methodology that this qualitative research case study has adopted to conduct the research.

3 CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

Figure 3.1: Format for Chapter Three

3.1   Introduction

This chapter identifies the research methodology adopted by the research study. It follows the research onion philosophy for the best results, and an inductive approach using research questions to narrow the scope. Furthermore, this chapter explains the research strategy, which includes the unit of analysis and unit of observation. The way in which data were collected and analysed during the study, is explained in this chapter. To show the ethical considerations taken into consideration during data collection, consent has been obtained from the organisation where the case study was conducted.

3.2   Research methodology

Rajasekar, Philominathan and Chinnathambi (2013:2) define research as "a logical and systematic search for new and useful information on a particular topic". The authors continue by saying, "it is a search for knowledge, that is, a discovery of hidden truths by means of collecting data from different sources like experience, human beings, books and journals". It is significant for the researcher to be aware not only of the research methods necessary for his or her research, but also to understand the research methodology in general.

Research methodology is a discipline of learning how research is to be conducted (Rajasekar et al., 2013), in other words, research methodologies are tools we use to know the reality. It is important for the person conducting the research to design a methodology for an empirical study.

This study explores the "why" and "how" of the misalignment between IT, procurement, and project management processes in the railway sector in South Africa. A qualitative research approach is adopted using semi structured questionnaire. Qualitative methods allow the researcher an elasticity to probe the early participant responses that is, to ask why or how. Probing helps the researcher to get answers on whether does the misalignment exist or not. The information received assist the researcher to come up with comprehensive recommendations. According to Burrel and Morgan's (1979) social paradigm, an interpretivist paradigm is followed.

3.3 Research philosophy
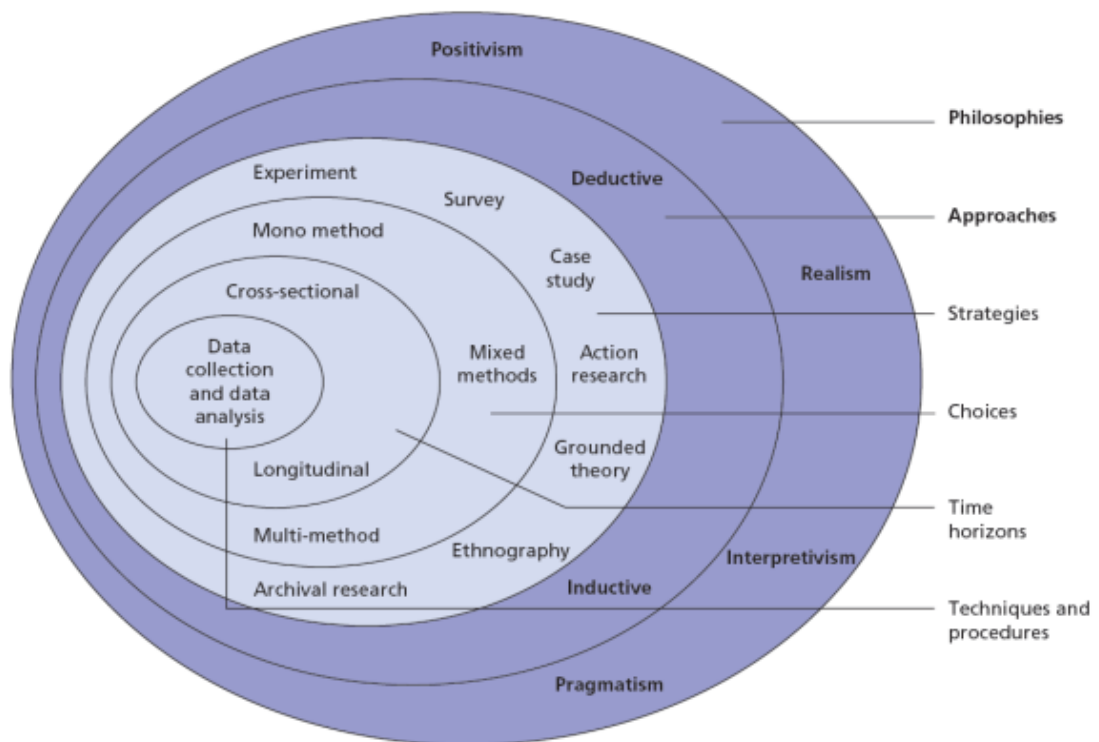
Figure 3.2: The research onion
(Source: Saunders, Lewis & Thornhill, 2009:108)

According to Burrell and Morgan (1979), a research philosophy is "a belief about the way in which data about a phenomenon should be gathered, analysed and used and includes the philosophies of ontology and epistemology".

The sections below explain some of the philosophies indicated in Figure 3.2.

3.3.1 Ontology

Ontologies are developed to facilitate knowledge sharing and reuse. Shvaiko and Euzenat (2013) state that ontology typically provides a vocabulary that describes a domain of interest and a specification of the meaning of terms used in the vocabulary. Ontology specifies the nature of reality that is to be studied, and what can be known about it. This research study tries to understand the reason for the misalignment in the railway sector in south Africa and how it relates to business and IT strategies therefore, the ontological approach of this research is subjectivism.

3.3.2 Subjectivism

Subjectivism is also known as constructionism or interpretivism. Perla and Parry (2011) define epistemology is a branch of philosophy generally concerned with the nature of knowledge. It asks questions such as, "How do we know?" In Burrell and Morgan's

paradigm, subjectivists are siding on the interpretivist side of the truth, which means they seek to understand or to explain.

3.3.3 Epistemology

This study regards epistemology as an accepted knowledge of study aims at discovering the true meaning of knowledge. This research study seeks to understand the reasons for misalignment. Participants are expected to state facts based on their previous experience or encounters related to the topic of the study.

3.3.4 Interpretivism

Interpretivism facilitates the understanding of why and how, which is in accordance with Burrell and Morgan's (1979) paradigm. Interpretivism enables the researcher to be alive to changes that may occur.

3.4 Research approach

Because of the interpretive paradigm chosen, an inductive or theory-building research approach is used for this study.

3.5 Research strategy

This study adopts a case study as qualitative method for conducting research. According to Rose, Spinks and Canhoto (2015), case studies are most commonly associated with qualitative research and qualitative data. Rose et al. continue by saying that a case can be something relatively concrete such as an organisation, a group, or an individual. Yin (2003) identifies case study research as "an empirical inquiry in a real life context, in most times when boundaries between phenomenon and context are not clearly identified".

3.5.1 Unit of analysis

According to Yin (2003), the unit of analysis is a component of research design related to the fundamental problem of defining what the "case" is. For this study, the unit of analysis is identified as the procurement and project management processes.

3.5.2 Unit of observation: Employees

Zoltan, Audretsch and Feldman (1992) refer to the unit of observation as a technological area or the industrial sector. The unit of observation in this research is identified as the employees who interact with the procurement, IT, and project management processes. The below sample of participants has been selected strategically by the researcher:

- 1 x IT Manager (Western Cape)
- 2 x Programme Manager (Western Cape)

- 1 x Telecoms Manager (Western Cape)
- 1 x Perway Technician (Western Cape)
- 1 x Buyer (Western Cape)
- 3 x Prasa Tech Project Managers (Gauteng)
- 1 x Prasa Tech National Sourcing Manager (Gauteng)
- 1 x Programme Director - Modernisation Office (Gauteng)
- 1 x Programme Manager – EPMO (Pretoria)
- 1 x SCM Consultant (Pretoria)
- 1 x IT Manager (Pretoria)

3.6   Data collection

Rose et al. (2015) advise that a researcher should set up a case study database to manage the evidence collected. The evidence can be electronic or in paper format.

To collect data and information, semi-structured individual interviews and one telephonic interview have been arranged for all the non-random, purposive selected participants (14), using a voice recorder and notes. The researcher asked the participants a series of predetermined semi structured questions. The reason for using this kind of questions is because the research study follows ontological approach. Interviews were conducted using interview guidelines (Saunders et al., 2009). The interviewees were informed of the recording, and consent was obtained before the interviews commenced (Mack, Woodsong, McQueen, Guest & Namey, 2011).

3.7   Data analysis: summarising, categorising, and thematic analysis

The research design for this study is an interpretive case study that is considered using qualitative methods.

Primary data were gathered through in-depth interview sessions with project managers and the Supply Chain Management (SCM) office staff involved in the processes, as they were current and therefore able to identify challenges with the process. Data collection was audio recorded then the recordings were transcribed verbatim before data analysis can begin. Interview notes were transcribed and reviewed for consistency. Data were then summarised and categorised, and a thematic analysis was carried out.

3.8   Delineation

This research has been identified as an interpretivist case study, with a qualitative approach using semi-structured interviews in three departments. To test the interview guide, the researcher conducted a pre-test of the interview for an opportunity to

perfect each question's concept. Individuals from the three departments were selected to act as pilot testers and an objective of the interview was explained. The pilot testers are not part of the intended audience. A case study explores and investigate a real-life phenomenon to address a wide range of research questions. The focus is on the procurement, IT, and project management areas in the railway sector in South Africa. These three departments were selected because of their relevance to the study. Participants were selected based on characteristics of a population and the objectives of the study. The study excludes IT governance alignment issues. It is limited to Cape Town, Johannesburg and Pretoria. All other regions are excluded.

3.9 Ethics

- Autonomy (respect for the person – a notion of human dignity)
- Beneficence (benefit to the research participant)
- Non-malfeasance (absence of harm to the research participant)
- Justice (notably distributive justice – equal distribution of risk and benefits between communities)

The researcher might be enthusiastic about his/her research idea, and excited to collect detailed, high quality data from the people who are the closest and most affected by what he/she is researching. This can pose a risk to the research process. It is always important to be aware of unethical research practices in terms of trying to gain or hold back some of the collected data. For this research study, consent has been obtained from the organisation (PRASA) where the case study was conducted. Resnik (2015) argues that there are many reasons why it is significant to adhere to ethical norms and culture in research, including that norms and culture encourage the objectives of research, which are truth, knowledge, and avoidance of mistakes. Ethical principles include honesty, respect for colleagues, integrity, openness, objectivity, non-discrimination, carefulness, confidentiality, respecting intellectual property, responsible publication, responsible mentoring, social responsibility, competence, legality, and human subject protection.

3.10 Conclusion

This chapter explained the qualitative research method adopted for the study, and introduced some of the research onion philosophies of Saunders et al. (2009). Data were collected from the participants using questionnaires and semi-structured interviews. PRASA has been identified as the case study.

The data analysis and findings of this qualitative research study are discussed and interpreted in Chapter Four.

4 CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

CHAPTER FOUR

4.1 Introduction

4.2 Data collection

4.3 Description of a researched company

4.4 Unit of analysis

4.5 Participant sampling

4.6 Interview process

4.7 Interviews

4.8 Research findings

4.9 Summary of findings and theme development

4.10 Themes

4.11 Summary
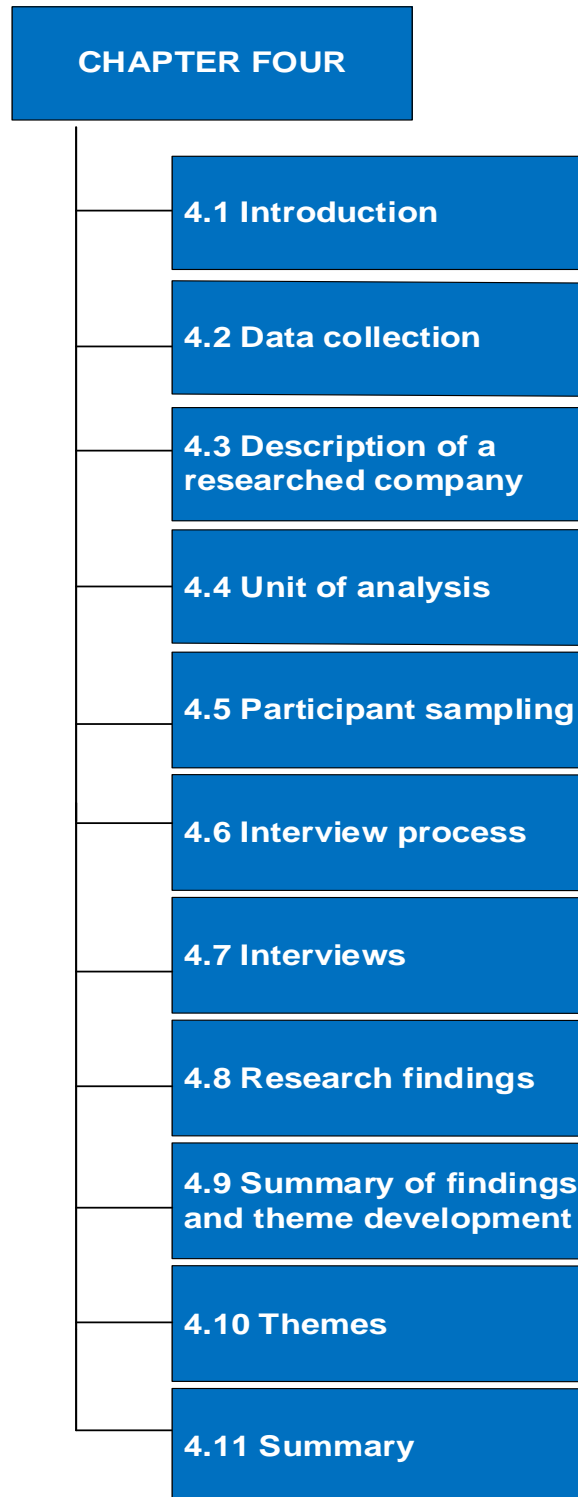
Figure 4.1: Format for Chapter Four

4.1 Introduction

This chapter describes the data analysis and findings from the interview answers provided by 14 participants. The data were collected by means of interviews from senior managers at a railway parastatal organisation in Cape Town, Johannesburg, and Pretoria. The interviewees included project managers, IT managers, and procurement personnel officials. The researcher decided to state the problem statement, main research questions, and the aim of the study again for the convenience of the reader of this document.

4.1.1 Problem statement

Projects in the railway sector in South Africa are faced with delays and disruptions (Milanzi and Barnard (2017). The misalignment between the procurement and project management processes results in project cost overruns and escalations.

4.1.2 Research question 1

RQ1: **What factors affect the alignment between procurement and project management processes in the South African railway organisation?**

4.1.3 Research question 2

RQ2: **How can the parastatal organisation align the procurement and project management processes?**

4.1.4 Research aim

The aim of the study is to explore the strategic alignment between procurement and project management processes in the railway sector in South Africa.

4.2 Data collection

The data were collected by means of one-on-one interviews between October 2015 and October 2016. A tape recorder was used as instrument to capture the interviews. All the participants were interviewed at their locations. After an interviewee granted permission to record the interview, semi-structured questions were posed to the respondent. The same questions were mailed in advance to each interviewee. The interview was allowed 'to follow its own path', but an interview guide was used to ensure that all the questions were addressed.

4.3 Description of the researched company

PRASA has been identified as the case study. PRASA is a state-owned parastatal company, established in December 2008, and responsible for most of the passenger rail services in South Africa. PRASA reports directly to the Department of Transport.

The company operates in four regions and has a corporate office in Pretoria. The history of railways in South Africa can be traced back to the late 1850s, more specifically 1859, when Cape Town had already started building a 72 km line linking Cape Town and Wellington.

PRASA consists of three divisions and two subsidiaries. The divisions are:
- PRASA Rail
- PRASA Technical
- PRASA Cres

The subsidiaries are:
- Intersite
- Autopax

PRASA Rail is the largest operating division in the PRASA Group, responsible for the Metrorail commuter services in the metropolitan areas and long-distance passenger rail services (MLPS = Main Line Passenger Services) between the major cities, including regional passenger rail services. The division employs 15 000 people countrywide.

PRASA Technical is also called PRASA Tech. This division is responsible for the implementation of the projects in the modernisation programme. Most of the project managers who are involved in the modernisation programme are from PRASA Technical.

PRASA Cres is responsible for real estate asset management, facilities management, and property development. They are working to increase the revenue income generated by PRASA's extensive property portfolio and to help PRASA run more efficiently and effectively.

Intersite leverages the non-operational and non-strategic assets of PRASA Group in order to raise additional revenue that will result in real improvement in transport services. The company generates income by using PRASA Group's assets in the following three ways:
- Strategic partnerships in property and asset development
- Third party projects income
- Commercial services

Autopax consists of long distance busses and has two distinctive brands, Translux and City-to-City. The company plays a significant role in transporting and servicing

long distance travellers throughout South Africa and increasingly to countries across the South African borders.

Two regions were visited during the interview process, namely the Western Cape Region and the Gauteng Region, which includes the Corporate Office in Pretoria. Three departments were interviewed, namely the Project Management Office, the IT department, and the Supply Chain Management department.

4.4 Unit of analysis

Table 4.1: Regions, sectors, and areas of operation

Region	Sector	Area of Operation
Western Cape	Project Management / SCM / IT	Cape Town
Gauteng Region	Project Management / Supply Chain Management	Umjantshi House
Pretoria	Supply Chain Management / IT	Hatfield (PRASA House)

The railway organisation (PRASA) gave consent for the data to be collected. A consent letter was signed by the Head of the Research department.

The core business of the railway organisation is to run commuter trains locally and over a long distance, to run long distance busses, and to manage property assets. It is available in four regions, but interviews were conducted in the Western Cape region, Gauteng and at PRASA House in Pretoria. PRASA implements the modernisation program in the Western Cape and Gauteng as pilot regions. The Durban and Eastern Cape regions were not included in the study because the implementers of all the mega projects are in the Gauteng region. Western Cape has a project management office led by a programme manager that reports directly to EPMO. This programme manager is responsible for monitoring the modernisation projects in the Western Cape Region, hence Western Cape was included in the interview process.

4.5 Participant sampling

The fourteen (14) participants are all employees of one railway organisation. The participants belong to three departments, namely IT, SCM, and the Project Management Office (Project Managers). These three departments were selected because of their relevance to the study.

4.5.1 Participant profile

Refer to Appendix C for the list of participants.

Table 4.2: Description of participants

Job Title	Region	Work Experience
IT Infrastructure Manager	Western Cape	He has more than 15 years of experience in the IT industry from different companies. He has nine years of experience in the railway organisation. He has been involved in many IT projects and won a Regional Manager's gold medal in 2010 for his initiatives.
Programme Manager	Western Cape (PRASA Rail)	This participant is a senior manager with more than forty years of experience in the railway organisation. He was appointed as a programme manager in the Western Cape Region in 2013 solely to manage the modernisation programme in the region. He is a knowledgeable, wise and an intelligent 62-year-old male. He was interviewed in his boardroom in the morning.
Head of Department	SPPM (PRASA Cres Western Cape)	This participant is a Head of Department in the Western Cape Region (PRASA Cres), only dealing with construction projects. He is a trained Quantity Surveyor (QS) with Project Management Registration (PMP), and holds a Masters qualification in Property Studies. He has much experience in running projects in the railway organisation. He even suggested further research that can be conducted on project management pricing.
Telecoms Manager	Western Cape	She manages projects and is a former chairperson of the Bid Specification Committee (BSC). She is a woman in her early 40s and a female engineer. She was explaining the CIDB process instead of procurement processes. Insufficient relevant information was received, as she is not directly involved in the process. She conveyed confidence in terms of the information she has knowledge of.
Technical Officer	Western Cape	This participant is a young engineering technician with limited knowledge of procurement processes. His career in the railway organisation started in 2013. He uses his own discretion in project implementation. He is a very focused young man, now acting as a manager.
Buyer	Western Cape	This participant is man of mid 50's. He has been in the railway industry for more than 20 years. He works in the SCM department as a buyer.

Job Title	Region	Work Experience
Senior Project Manager	Gauteng (PRASA Technical)	This participant is a mastermind behind construction project management implementation. The interviewee is one of the best senior project managers in the railway organisation – an extremely intelligent man who knows his story. In the absence of a project management process in his organisation, he developed one and sent it to the Board for approval.
Senior Project Manager	Gauteng (PRASA Technical)	This young man has less than five years of experience in this railway organisation, but he possesses past experience from another railway organisation. He is a Senior Project Manager who implements the modernisation projects. He is currently busy with a depot upgrade project. He likes to read books and even has audio books that he likes to play during flights. He spends time in the air, travelling to all the regions where he implements his projects. He is in his early 40s.
National Sourcing Manager	Gauteng (PRASA Technical)	This is a mature woman with much knowledge in her area of work. She joined PRASA in 2013. She acquired good experience from her previous work. She is a senior manager who knows her story. She is well articulated and probably in her mid-50s. The interviewee is a short and tiny woman. The Interview was conducted in the afternoon before 16H00.
Project Manager	Gauteng (PRASA Technical)	This participant joined the organisation in October 2014 as a project manager. He manages station upgrade projects in the modernisation programme that is currently underway. He is a young, dark man in his mid-30s. His interest is mostly in the quality of standards.
Programme Director	Gauteng (PRASA Technical)	The participant is a pioneer and a giant in project implementation. He is a well-articulated man who speaks soft and clearly. He is a visionary man, a motivator, and a mentor. This participant was a programme director for the entire programme, assisting the regions to get ready to receive the new trains. He was instrumental in the testing phase when the trains arrived in South Africa from Brazil. He initiated alignment in the organisation and initiated the project implementation method for the organisation.

Job Title	Region	Work Experience
Programme Manager	EPMO (Corporate Office)	He has project management experience gained at a municipality. He is responsible for prioritising projects for PRASA and allocates funding to these projects. He monitors projects and submits spending statements to Treasury. His interview was the longest. He has much knowledge, and he was willing to share everything he knows. His interview was done telephonically.
SCM Consultant	Supply Chain (Corporate Office)	This participant was an outside consultant, contracted for twelve months. He joined PRASA at beginning of 2016. His role was to amend the supply chain framework for the organisation. He had a little knowledge of the railway organisation. He conducts training on new policy to the regions.
General Manager IT	IT (Corporate Office)	This participant implements all the IT projects nationally. He has been with the organisation for a long time. He is a very soft-spoken man, in his mid-50s.

4.6 Interview process

Interview questions were sent to participants via email before the interview. Most interviews were conducted in the Gauteng Region, in the boardroom or office.

- All participants were asked to avail themselves from 3-7 October 2016
- No exact times were set per interviewee, but the researcher arrived at the offices at 08:00 in the morning and looked for available participants to interview as the project managers were in and out of meetings and some meetings were called on short notice
- Some participants rescheduled their time slots and adhered to these times
- Before each interview, the researcher introduced herself and explained the purpose of the interview. Interviewees were told that the interview is voluntary and information is for academic purposes only
- Only one participant requested his manager's permission even though the consent from the organisation was sent to the participants
- All the conversations were audio recorded. The researcher explained to the participants that the conversation would be recorded and the recorder would always be on top of the table to capture the information. All the interviewees agreed to be recorded

The interviews were set to be twenty minutes long, but because of the wealth of information senior managers have, some interviews took more than 30 minutes; and

the longest was more than sixty minutes. The first four interviews in the Western Cape Region were captured using an A7 Samsung cell phone device. The remainder of the interviews were captured on an Olympus recorder, saved on the C-drive of a laptop, and backed up on an external hard drive.

4.6.1 Transcribing the interviews

This was the most daunting exercise that took up a large amount of time. The researcher listened to the tapes, transcribed the interviews from tape to paper, and then read over the written transcripts. The researcher needed a quiet area to listen to the tapes and had to play back some of the recordings. The researcher had to pause where a word was not clear, and then continue with the tape and proceed with the sentence. A missed word would eventually make sense at the end of the sentence. The most time-consuming transcriptions were the telephone interviews as some words were difficult to decipher and understand.

4.6.2 The analysis process

Marshall and Rossman (1999) describe data analysis as the process of bringing order, structure, and meaning to the mass of collected data. The researcher first underwent a process of coding. The process was 'messy' and time consuming. The coding process led to identifying the categories and themes. The following steps were followed:

- Interviews were conducted using a recorder as tool to capture the conversation
- Data were transcribed
- The researcher managed to identify themes from the transcribed data

Table 4.3: Example of interview text marked in colours with codes of phrases

Interview with P3 (Programme Manager)	Codes or Phrases
Interviewer: Thank you P3. According to your own understanding as a head of the department, do you think that your organisation have the two processes, project management and procurement processes? Do you as a person think that is there any misalignment?	
P3: It depends in terms of the processes. I think a lot of things needs to be clarified upfront, because obviously supply chain is a new way in which government seeks to procure businesses or services from suppliers, of which, if you look at the functions of a quantity surveyor from a professional quantity surveying perspective, that function is still there although its only limited to ensuring that a	Planning process SCM Alignment

quantity surveyor or a client procures the required services for construction purposes. So, the main supply chain processes as per the organisational supply chain processes that one refers to a multitude of or rather a wide spectrum of services and perhaps material that the business procures. In terms of the misalignment, I think that perhaps maybe the supply chain personnel needs to be more exposed in terms of construction procurement processes and how they function. And also if you look at the so called contract management function which lies with supply chain, it's not done to the T, so it ends up by default landing with the project managers within the SPPM of which its not their function in terms of the definition of the services offered by the supply chain unit. So, in that way maybe there's that's one area of misalignment or mis-expectations in terms of who has to do what and what is expected of them.	Procurement process Misalignment Procurement process Contract management Project managers SCM Misalignment
Interviewer: In your organisation, is there any procurement process that is specifically designed or customised for project managers specifically?	
MN: No they follow the same process as per the procurement policies of the organisation. There is no specifically designed process as far as I can remember	Single process Procurement legislation

Table 4.4: Interview text marked in colours and identified with codes or phrases

Coding		Themes
No consequence management	Consequence mng	Strategy
Construction Procurement	Construction mng	IT systems/Integration/Alignment
IT assist in alignment	IT systems/Integration/Alignment	Processes
Poor process timeframes	Processes	Project management
Procurement legislation	Procurement	Procurement management
Project	Project management	Segregation of duties
Gap identified No need for joint planning	Segregation of duties	Consequence mng
Strategic document	Strategy	Training
Resources required	Training	
Align rail transport		
EPMO but no PM policy and procedures		
Integrate PM and PP processes		
No PM module on SAP		
No procurement integration / alignment		
Construction and procurement legislation		
No regional PMO		
No SAP integration		
BPM tool / IT software Project		

After summarising the codes and themes, the researcher managed to develop eight themes by identifying similarities.

4.7   Interviews

4.7.1   Introduction

In this section, the interviews that have been conducted are discussed, and the research questions, sub-questions, and interview questions are linked to the interviews. The derived findings are stated, summarised, and linked to the individual research questions. From the summary, themes are developed for the discussion. For the ease of reading, RQ1 is presented again, followed by the SRQs. Each SRQ is answered by the interview questions (IQs) applicable to the respective sub-questions.

4.7.2   Interview questions (IQs) and their findings

RQ1:   What factors affect the alignment between procurement and project management processes in the South African railway organisation?

SRQ 1.1: What are the procurement processes being used for?

IQ 1.1.1: *What is your understanding of organisational procurement policies and procedures?*

The organisation has a clearly documented procurement policy and standard operating procedures. The knowledge of the procurement processes at regional level differs from the participants at Head Office in Johannesburg and Pretoria. Head Office project managers possess advanced knowledge of the procurement processes, while at a regional level participants have less knowledge of these processes. The reason for this seems to be that at Head Office there are senior managers and executives and they deal with large projects, whereas at a regional level, project managers can only run projects of up to 10 million rand. There are many processes or activities added when the contract is above 10 million rand, and the participants in the regions are not familiar with these processes. Such activities involve contract approvals.

According to P2, P4, and P5, the reason why the project managers do not know the procurement processes can be attributed to a clear separation of duties between project managers and procurement officials, and this is stipulated in the procurement policy. P5 stated the following: "I will say there is a boundary in between; I wouldn't say they understand" (Appendix D5). According to P4, the organisation is supposed to be using the Construction Industry Development Board (CIDB) procurement processes. A knowledge gap has been identified by P2, which is supported by P6: "Project managers also don't understand the nitigrity [sic] staff when it comes to procurement processes and especially with procurement processes that can hinder a lot; it's the timeframes" (Appendix D6). P2 continued by saying that a person needs to have a good understanding of both processes to be able to develop integrated planning. P2 identified a risk when he stated that, "you get a situation I believe where a project manager assumes that this is the procurement process, or how long it will take, and not always confirms with supply chain; whereas, if you have an integrated plan where the supply chain and a project manager sit together and they agree on the procurement plan, they agree on the procurement process…" (Appendix D2).

The majority of participants (7 of the 9 project managers) conveyed the need for procurement processes to be improved. For example, P1 stated that, "I think the whole procurement process needs to be re-engineered to accommodate for the present times" (Appendix D1). On the other hand, some participants (5 of the 14) indicated that there is no need for the whole process to be improved; rather, some changes need to be made, including the identification of more detailed timeframes. "I think I have mentioned that what needs to be improved is not necessarily the process, it's the turnaround" (P14, Appendix D14).

Finding 1:   The organisation does have procurement policies and procedures

Finding 2:   On a regional level the procurement processes are understood differently than on head office level; not all the project managers know the process flow, and some participants have never seen the process diagrams

IQ 1.1.2: Is there any alignment between procurement and project management processes?

From the 14 participants interviewed, 12 participants agree that there is a misalignment between project management and procurement processes. P6 stated that, "there is, there is normally in any business" (Appendix D6).

All 14 participants elaborated on different areas in the processes where misalignment is experienced. Project managers have a problem with timelines that are not defined in the procurement process. P3 pointed to a lack of construction knowledge by the procurement officials responsible for buying services. This contributes towards the misalignment between procurement and project management processes.

> "In terms of the misalignment, I think that perhaps maybe the supply chain personnel need to be more exposed in terms of construction procurement processes and how they function. And also if you look at the so-called contract management function which lies with supply chain, it's not done to the T, so it ends up by default landing with the project managers within the SPPM of which it's not their function in terms of the definition of the services offered by the supply chain unit. So, in that way maybe there's that one area of misalignment or mis-expectations in terms of who has to do what and what is expected of them" (P3, Appendix D3).

According to P6, project managers lack knowledge in terms of procurement processes and regulations: "The gap is basically knowledge of the supply chain policy because project managers need to adhere to the supply chain policy. It's basically just a lack of knowledge of the policy and the process within how we as a group, I mean project managers, SCM and Finance, work together" (Appendix D6). P2 indicated the need for an integrated process between procurement and project management processes in the organisation. P9 said that there does exist a misalignment in the organisation: "…we work with procurement plans, where the project managers, we all, agree that on the procurement plan and from our side as SCM making the project management office of the rules and regulations, that we need to adhere to that, is from the national treasury" (Appendix D9). P10 pointed to a misalignment between international norms and standards and the procurement requirements, and referred to the Engineering

Council of South Africa (ECSA) and the Public Financial Management Act (PFMA) that are not in alignment: "We've got your ECSA Engineering Council of South Africa where we get our engineering specifications schedules and the rest. But here at PRASA the processes are not really aligned" (Appendix D10).

Finding 3: There is no alignment between procurement and project management processes

Finding 4: The two departments (Procurement and Project Management) do not take responsibility for the processes as they blame each other for wrong doings

IQ 1.1.3: *Are there any procurement processes specifically designed to assist project managers in meeting their project targets?*

Most of the participants (13 out of 14) agree that there is no special procurement processes designed by the organisation for project managers to help them execute their projects. P4, from the region, indicated that a process does exist: "It is there, it is existing, because as project managers we had to assist the SCM to develop one… It is the BSC [Bid Specification Committee] procurement processes. Actually, it's an agreement. I don't know if it's a process; I will find it out for you on how to evaluate things on BSC" (Appendix D4). The participant was referring to a BSC process. This shows the lack of knowledge regarding the process, especially on a regional level. Although the majority of the participants agree that there is no special process, P12 said they have "tried to twick [sic] and pull and do but the process remained relatively the same" (Appendix D12). P2 and P6 agree that the organisation does have a procurement policy and standard operating procedures, but the problem is the lack of knowledge by the individuals in applying these:

> "I think there is that aspect to it, and then there is an aspect of improving the knowledge base between the supply chain and project managers so that they can come up with the proper integrated plan that they both understand and that they can apply so that, for example, supply chain understands what effect their process has on the production of the project" (P2, Appendix D2).

P6 argued: "I think project managers does [sic] not get [to] explain too much how the procedures work, how certain processes work, and certain authority figures that need to be called upon to forward certain processes. I think that's the biggest misalignment" (Appendix D6). P6 further mentioned that these documents could assist the project managers in breaking down the knowledge gap and in understanding the whole procurement process.

Finding 5: There is a lack of procurement process knowledge on regional level

Finding 6: The organisation does not prioritise key projects

IQ 1.1.4: *Do you have all the standard supply chain committees as per the Public Financial Management Act?*

All 14 participants agree that the organisation is using all the committees enshrined in the PFMA. The most mentioned committees are the Bid Specification Committee and the Bid Evaluation Committee. P12 however believed that although the organisation has the committees, the implementation is not necessarily in accordance with the PFMA. "The BSC is enshrined in the PFMA but I think the way it is implemented is not necessarily in accordance or aligned to the status of the PFMA" (P12, Appendix D12). When a quorum is not met the meeting is cancelled, which results in delays.

Finding 7: The naming of the supply chain committees at PRASA is not the same as the way it is named in the PFMA

Finding 8: BSC involves internal and external people; if external people are not paid, the committee suffers a quorum

IQ 1.1.5: *Do you manage some or all of the procurement processes?*

Eleven (11) of the 14 participants managing projects said they do not manage the procurement processes. P2 noted that, "no, the policy is very clear – project managers do not get involved in the supply chain processes, sort of like separation of duties because it could happen that, let's call it a project manager, influences the process" (Appendix D2). P3, P7, P9, P10, and P11 confirmed that the procurement process is the responsibility of the SCM Manager. "The responsibility does not lie with us; we cannot influence the process. Anyhow, it's mainly the supply chain manager's responsibility. So it's an indirect management from project management's side" (P3, Appendix D3). According to P10, a project manager is nominated to be part of the committee to perform certain duties. This is supported by P8 who said that, "no, not directly; it's on an ad-hoc basis. I think on a Bid Specification Committee you will participate as a submitter" (Appendix D8). The most common committee that the project managers are invited to is the BEC where they are expected to make submissions. The BEC is there to review, approve, or reject all the tender specifications for procurement. According to P7, the fact that project managers are not managing the procurement processes is a deviation from the PMBOK 9

knowledge areas in terms of procurement management: "The project managers does [sic] not solely manage the process, which is a bit of a deviation from PMBOK 9 knowledge areas in terms of procurement management" (Appendix D7).

Finding 9: The procurement processes are managed by the SCM department and the project managers are not involved in the process

IQ 1.1.6: Is there a need to improve the procurement processes?

P13 is a specialist appointed to develop a new SCM Policy. This policy has been signed off by the Chairman of the board on 19 August 2016. The outcomes of this research show that the new organisational procurement processes have not yet been adopted by the organisation. The old procurement processes are still in use, even after the new policy has been signed off. P13 is now attempting to align the procurement processes with the new policy and the standard operating procedures.

According to P9 and P12, the current organisational procurement processes are under review. P9 mentioned that, "there is a policy that was approved on the 19th of August but we [are] still waiting for processes and procedures of that policy" (Appendix D9). P12 argued that, "there are reviews being done but there are processes which are being included in the procurement process, for instance, the one that I mentioned – BSC" (Appendix D12).

From the research it can be concluded that the participants have different views on whether the procurement processes should be improved or not, but the majority of the participants (7 of the 14) agree that there is a great need for improvement of the current organisational procurement processes. P9 could not comment, as she has not seen the new procurement processes.

P7, P8, and P11 complained about the long turnaround time of procurement processes. They need the process timelines to be improved. P11 complained specifically about the time it takes to make a decision to approve these processes: "If you have a special dispensation in which you've got a dedicated team of people where you could have a dedicated procurement officer who is there to serve, the programme does not do any other operational procurement, but only serves the projects within the programme. That in itself will improve the time" (Appendix D11). P7 stated that, "employ specialist people with built environment experience from the built environment, from project managers to supply chain, because supply chain, if you need a person, for example a contracts manager, you need a person who's got a clue of construction of the built environment" (Appendix D7).

P2 identified the need for change in the procurement processes due to environmental changes that happen faster than the organisation can react from a policy point of view. P6 did not see a need for processes to be improved as it is aligned with treasury regulations.

Finding 10: There is a need for the procurement processes to be improved

Finding 11: Project managers are expected to use the new procurement policy with old processes and old procedures

SRQ 1.2: What project management processes are being used by the organisation?

IQ 1.2.1: What is your understanding of organisational project management policies and procedures?

The eight (8) participants (P3, P5, P7, P8, P10, P11, P12, and P14) who have been asked this question (IQ 1.2.1) agree that the organisation does not have a project management policy and procedure.

P3 said that, "we are still lacking in that respect; we don't have policies that govern our project management processes and procedures" (Appendix D3). P11 noted that "the closest to the guiding document that I have seen is probably maybe the upfront planning stages of a project, which is that before the project is done there is a business plan which is approved, which is then allocated a budget and then it can be executed from there. That is more or less the policy framework that exists from execution going forward" (Appendix D11). According to P8, he has not seen a project management policy and believes that some of the challenges he is facing could be clarified by the policy:

> "I'm looking for one; I'm being serious. I'm looking for one and when I get it I think it will be a joyful day. Even yesterday I had a meeting and that was one of my issues because I was told that there are projects that I may not proceed doing because there were no feasibility studies; yet, I was given a mandate to run with the project, but then I'm saying, where is the guiding document that tell me you can't proceed with this unless this is done?" (Appendix D8).

P5 argued that, "I use my own knowledge" (Appendix D5). In clarification of the policy, P14 indicated that the only available policy document in the organisation is the procurement policy. All 14 participants referred to PMBOK as the preferred project management process.

Finding 12: The understanding of processes is different because the organisation does not have project management policies and procedures

IQ 1.2.2: What project management processes are you using?

The research shows that the organisation does not have standard project management processes across its divisions. P3 said that, "no, we just use best practise processes, which are not tailor made for our organisation. We are still lacking in that respect; we don't have policies that govern our project management processes and procedures" (Appendix D3). According to P11, "every division is doing their own project management if you may so call" (Appendix D11). P14 argued that the absence of project management processes is a challenge: "It's one of the challenges in PRASA at the moment whereby I don't think we have one project management methodology we are using throughout. We do have EPMO, the Enterprise Project Management Office. Their main role is funding" (Appendix D14).

All 14 participants referred to PMBOK as the preferred project management process. P12 pointed out:

> "There are attempts to get [a] professional team to come in and develop processes and procedures. I think at least two RFPs which I know will be speaking to [the] development of processes and procedures and [an] automated project management system, not an automated but a least a computerised project management system. And then there is another one - to appoint a panel of professional consultants who would then be selected to assist with project management processes and procedures implementation verification and all sorts that relate to capital" (Appendix D12).

Project managers are using their knowledge from previous experiences from different companies. According to P5, "I use my own knowledge" (Appendix D5). P8 pointed out that, "when I joined PRASA, I never received this as a pack of how we run the projects. You bring your experience" (Appendix D8). P10 argued that, "it depends on the knowledge that each individual possesses. Some are using Prince 2 and some are using PMBOK" (Appendix D10). P10 believes the reason why the organisation does not have the project management process in place can be attributed to not having adopted the ISO 9001 quality standard where it will be forced to be a process-driven organisation.

Construction project managers are using processes from engineering professionals, for example, South African Council for Project and Construction Management Professions (SACPCMP) processes, CIDB, and ECSA. P3 stated that, "for now, we are following PMBOK, and also we are following SACPCMP processes" (Appendix

D3). P4 argued that, "we approached CIDB for a process. We go CIDB here in Cape Town to run workshops with us because we didn't know anything... CIDB came and they gave us on how to run projects and how to rank them" (Appendix D4). P10 noted that, "We've got your ECSA Engineering Council of South Africa where we get our engineering specifications schedules and the rest. But here at PRASA the processes are not really aligned" (Appendix D10).

P7 realised the need for project management processes in the organisation and he drafted it: "I drafted one which I [am] still trying to push it to be approved, which is a project execution process with templates in terms of a construction project" (Appendix D7). According to P12, "there are no formal project management processes and procedures that the organisation has approved" (Appendix D12). P3 concluded by saying: "Because we don't have those processes everybody tries to have their best practise methodology in doing things which is not necessarily what everybody understands" (Appendix D3).

Finding 13: There are no standard project management processes

IQ 1.2.3: Are your project management processes automated?

According to P1, P2, P3, P4, P5, P8, P10, P11, and P12, the project management processes are manual. P12 from EPMO confirmed that, "they are manual... There are attempts to get [a] professional team to come in and develop processes and procedures. I think at least two RFPs which I know will be speaking to [the] development of processes and procedures and [an] automated project management system, not an automated but a least a computerised project management system" (Appendix D12). P5 and P12 referred to EPIC (Enterprise Project Information Centre) as a project management system available in the organisation.

P5 said:
> "We've got EPIC that was introduced. I tried to use it personally. I registered my projects. I sent some emails to Joburg to whoever that was involved with that one, then I said no, this is going to take me too long with the software although that EPIC would have been a good system to the reports" (Appendix D5).

P12 explained why the project management processes are manual:
> "There was a system EPIC, which was mainly going to be used to document and help as a document repository and help to give an overall view of projects in PRASA, but I think it wasn't supported at an executive level. Things that are supported at executive level, they happen. Executives push for those things to happen and the report of the system is the same. Some of these things fail

because let's call it internal politics. That is not the only reason that the system may have failed; it may have failed because also of the actual system not being as user friendly as it could be or the IT network problems that it experienced" (Appendix D12).

Finding 14: Project management tasks are manual

IQ 1.2.4: *Are there any project management standards that you are following?*

According to the research outcomes, the majority of participants (9 of the 11 project managers) referred to PMBOK as a project management standard. "I do not think it's an accepted standard although the project managers, when they come out of their studies, everybody will talk about PMBOK and they try to apply it" (P2, Appendix D2). According to P10, "the answer is no. There is no standard process that is being used. It depends on the knowledge that each individual possesses. Some are using Prince 2 and some are using PMBOK" (Appendix D10). P11 clarified the absence of project management processes by saying:

> "We tried through the programme in the war room; we were at least able to standardise that each project of course will have a project plan that should show this. In the reporting it should report this that we tried to do, but it was only for those programmes that form part of the rolling stock fleet renewal modernisation, not any other projects in the organisation. So if you go to a project manager somewhere in PRASA Cres in Cape Town, the way he does his projects is not necessarily the same way that the guy up here is doing his projects. He does it as he understands it" (Appendix D11).

P12 from EPMO recommended that the project execution be based on PMBOK: "…its recommended that you basically execute your projects in line with PMBOK" (Appendix D12). P14 customised the project management process using PMBOK for his department. "We've got a methodology which we have adopted, it's really based on PMBOK but it's not a pure PMBOK there is [sic] modifications where we modified according to our needs" (P14, Appendix D14).

Finding 15: There is no project management standard accepted by the organisation

Finding 16: Project managers are following PMBOK

SRQ 1.3: What are the challenges that the organisation experiences with the procurement and project management processes?

IQ 1.3.1: *What is the impact on the organisation for not meeting project deadlines due to failure in the project and procurement processes?*

The research shows that the organisation is experiencing a negative impact due to the failure of not adhering to project and procurement processes. P8, P9, and P11 explained that the organisation ends up not being able to deliver on its mandate or commitments. "Outcome may not be achieved at the time it is supposed to" (P8, Appendix D8). "We failed to deliver our mandate as an organisation, that is, of providing trains on time" (P9, Appendix D9). "The business does not deliver on its objectives, simple" (P11, Appendix D11).

Participants mentioned financial, reputational, and operational impacts. P3 and P14 described the impact as huge. P3: "It's huge" (Appendix D3). P14: "There is a huge negative impact on the organisation" (Appendix D14).

One of the most mentioned impacts is financial loss by the organisation due to the delays in implementing projects. Seven (7) of the 14 participants pointed out that the delays can cost the organisation a lot of money. P3 noted that the "result in failure has a huge impact on the organisation" (Appendix D3). P3 further explained that the failure results are due to a "lack of capacity, lack of focus, lack of individual capacity, the lack of a sense of urgency on these things, and a lack of understanding the impact of a delay of awarding a tender from a costing perspective" (Appendix D3). P8 highlighted a financial impact caused by poor procurement processes: "Contract price adjustment – I don't think it was checked properly because the contractor believed we have agreed on it while from the procurement person here believe it was not part of the contract, so the provision thereof was not properly clear" (Appendix D8).

According to P14, project delays can have a financial impact. The environment is changing and project managers will be forced to do variations. P14 pointed out that, "you will find out that the environment has actually changed, that time, that spec does not necessarily fit; [the] first thing you are going to do now is variation" (Appendix D14). P2, P4, P8, P12, and P14 agree that project costs increase due to the delays in the implementation of a project. P10 said that, "its fruitless expenditure and it will lead to delays" (Appendix D10).

According to P2, P8, and P10, the organisation loses money on legal battles against suppliers due to the delays in implementing projects. P2 said that, "you could get situations where contractually you need to start paying penalties and stuff like that (Appendix D2). P8 noted that, "there could be legal challenges with the suppliers, which you lose money off course" (Appendix D8). P10 argued that, "we've got a lot of delays, cancelations, we run into legal battles with suppliers… If you go the legal route PRASA will be taken to court and they will have to pay" (Appendix D10).

According to P2, P8, and P9, the organisational reputation becomes affected if processes are not followed properly. P2 said that, "any delays have got that negative reputation impact" (Appendix D2). P8 argued: "They are various and reputational because you have made commitments to commuters in some instances so you say things that you don't do" (Appendix D8). P8 and P10 explained the damages caused by frustrated commuters if the company fails to follow processes when executing projects. "It gets worse because they will burn our facilities and trains. They will say you said by this time we will have a smooth journey but now it's not there" (P8, Appendix D8). "It's going to lead to commuters being frustrated; burning stations, burning trains" (P10, Appendix D10). P8 explained the operational impact as follows:

> "Some projects are supposed to lower maintenance after you deliver them. It means the maintenance cost is still high as long as the project is not delivered. Some projects are meant to bring more revenue; it means you are not getting the revenue because the project is not delivered and there could be legal challenges with the suppliers, which you lose money off course" (Appendix D8).

In clarification of the operational impact, P2 said that, "the implementation of the project has got an impact on making operations more efficient because remember projects are designed to make the operations efficient" (Appendix D2).

Finding 17: The organisation loses money due to legal battles and payment of penalties

Finding 18: The organisation is not able to deliver on its mandate from government to provide a rail commuter service

IQ 1.3.2: Are there any consequences that the process owners face?

According to P1, "the only people who face consequences are project managers because they are the ones who request the money" (Appendix D1). P3 supports what P1 said: "The project manager gets blamed for everything even though there is a process owner for the procurement processes" (Appendix D3).

The senior project managers, P7, P10, P11, P12, and P14, agree that the process owner faces no consequences in the event of project failure due to a process that has not been followed properly. P7 explained why process owners are not facing the consequences:

> "You will find that some companies, like state-owned, they do not fire; rather, instead they redeploy a person because you find that politically they have a different mandate that I do not want to talk much about it. State entities, there is always political interference. Because a guy will tell you straight that I was

instructed to do it like this. So if he was instructed to do it like this he is going to be covered. He is not going to be fired but redeployed, but another guy comes in" (Appendix D7).

P11 supports what P7 said: "Yes, you would say that there are managers that have been moved out of positions and project managers that have left, but it was in my opinion never related to them failing to apply the process per se; there were many other things leading to their removal" (Appendix D11).

According to P8, audits are performed by the Auditor General, but P8 does not have an experience of seeing a process owner facing the consequences. P8 said that, "if you don't follow the process the audit will pick that up... I have not heard an experience of seeing it directly, but I've heard that in some instances they have" (Appendix D8). P9 noted that, "if we had a strIT performance contract as employees, the consequence would be… it affects your performance and maybe the consequence will be whether you get a promotion or you get disciplined" (Appendix D9). According to P10, "there are no consequence listings that I'm aware of except that on [a] daily basis we are told that any non-adherence to processes, which do not exist by the way, will face a punishment from the organisation" (Appendix D10). P11 supports what P10 said: "I have never seen anyone really taking consequences as a result… so, no consequences really" (Appendix D11). P12 argued that, "I have not seen anybody reprimanded or anything there. There are no consequences" (Appendix D12). P14 noted that, "currently, I have not seen any consequence management", and suggested that, "it is an area that still needs to be managed from an organisational leadership point of view where, really, if things do not happen, there should be reasons why, and people should actually account, but currently I see less of that" (Appendix D14).

Finding 19: The procurement or project management process owner faces no consequences

Finding 20: There is political interference with the processes

IQ 1.3.3: Is there any forum where the procurement and project management processes are being discussed for matters of alignment?

The research shows that there have been attempts made by individuals before to deal with the project delays caused by procurement processes in the organisation. Those attempts failed due to different reasons.

Three programme managers, P2, P3, and P11, initiated forums between project managers, procurement personnel, and the Finance Department. The purpose of these forums was to unlock bottlenecks experienced by the projects, particularly with the procurement processes. These managers noticed the slow procurement processes. P2 further noted that, "I am aware of the forum that EPMO tries to have every six months or so; they call it the project management forum that is managed through [the Programme Manager's] office where project managers from the regions, Supply Chain, Finance, the EPMO get together and they discuss matters of mutual interest" (Appendix D2).

P8 and P12 are in support of what P2 said. "EPMO had made attempts in terms of, but it was more a galvanising project community at large to have cross functional discussions; at some point procurement was part of that" (P8, Appendix D8). P12 argued: "I think the engagement that existed have [sic] fallen away. There was [a] project management forum that used to be held on [a] quarterly basis" (Appendix D12). P12 explained the reason as follows: "That fell away especially with the changing management" (Appendix D12).

P3 noted that, "what I have done is I have implemented on my side weekly meetings. By that I'm trying to get to a point where we are trying to understand the bottlenecks from their side and what it is that we can do so that we can advise on the impact of their delays" (Appendix D3). According to P3, the forum is not working. "It does not seem to be working because there are projects that are in Procurement for more than 10 months or close to 10 months now; it's not really working" (P3, Appendix D3).

P5 referred to the forum initiated by P2 when he stated the following: "I think P5 started this thing. We will have reporting meetings every month on CIP projects. Previously it used to be Finance, Supply Chain, us project managers, to report on our projects. Each project manager reports on projects, the status, and the hiccups" (Appendix D5).

The only interaction between project managers and procurement personnel that P6 and P10 are aware of is the Bid Specification Committee. P6 said that, "the only forum that is currently there is what the process requires; the committees used to say that it's the Bid Specification Committee" (Appendix D6). According to P10, "in trying to tailor the specification, the project manager will liaise closely with Supply Chain Management for input" (Appendix D10).

P11 initiated a forum that he called the 'war room'. Similar to P3, P11 had weekly meetings. P11 explained the purpose of this meeting: "We were identifying projects that were held back due to procurement… We did it then issues were resolved for

some; for some were never resolved, but the forum never continued to my knowledge" (Appendix D11). These are projects in the modernisation programme. Modernisation has readiness projects, rolling stock recapitalisation projects.

P14 confirmed that he attended the readiness meetings: "I haven't seen anything like that, but being involved in the readiness project where I actually represent IT", the SCM department was part of these meetings. P14 continued by saying: "It brings different project managers… and it also brings SCM" (Appendix D14).

P4, P5, and P14 complained about the lack of commitment of the SCM department in these meetings. P5 indicated that, "SCM pulled out" of these meetings, "but now I only see project managers in those meetings" (Appendix D5). P14 argued that:

> "The SCM contribution was still not what one has wanted [it] to be. As I say, there was that level of engagement of SCM in that forum where we've got a project, but at the moment, when I go to that meeting you will be surprised to find anyone from SCM… I'm still sitting in those meetings and you find out that slowly SCM pulled out and we are on our own" (Appendix D14).

P14 preferred to talk about the reason after the interview and not on record. "It's probably reasons in my head but no specific reason... I think maybe we should put it for after the interview" (Appendix D14). P12 concluded by giving reasons why the EPMO forum is no longer taking place: "There was [a] project management forum that used to be held on [a] quarterly basis. That fell away, especially with the changing management. The changing management has also been a huge distracting factor in terms of the implementing the projects" (Appendix D12).

Finding 21: Forums were created but were unsuccessful

Finding 22: There is lack of commitment by the SCM department

RQ2: **How can the parastatal organisation align the procurement and project management processes?**

SRQ 2.1: How are the process tasks being performed by the organisation?

IQ 2.1.1: What is the linkage between the organisational strategy and procurement and project management processes?

According to P1 and P4, there is no link. "There is no linkage at all because if there was linkage, procurement will know that this project will be useful and it has to be

delivered in such they know the timeframes and they will able to meet the necessary timeframes for the project" (P1, Appendix D1). P4 said "no" (Appendix D4).

Nine (9) of the 12 participants mentioned the link between projects and the organisational strategy. P2 explained the link as follows: "I think in principle yes, that is the role of the EPMO because they are supposed to approve projects that support the PRASA strategy" (Appendix D2).

P3, P11, and P12 discussed the link between the organisational strategy and the modernisation programme. P3 said the following: "There is a link between project management and the strategy because one of the main strategic focuses is to modernise the assets, so by doing that, we implement the projects in the railway environment to improve the asset and to modernise them" (Appendix D3). "Most of the projects I will say are aligned with the strategy of the organisation one way or another. If I look at the rolling stock fleet renewal programme, I look at modernisation activities around it; there is a perfect link in there" (P11, Appendix D11). P12 is in support of P3 and P11's opinions: "The strategy talks about modernisation, it talks about extension, all those are projects that are being implemented" (Appendix D12). P12 further explained that the way in which procurement processes must be applied, is missing in the strategy: "There is no saying how are we going to ensure that those projects are prioritised in terms of execution in terms of procurement" (Appendix D12).

According to P6, the link with procurement processes is through treasury: "Our only link is just basically via Treasury and trying to do what Treasury guides us" (Appendix D6). P14 clarified the link by saying: "Yes, there is. When you do the business case, you need to show that linkage otherwise if you don't show it, chances are you don't get the money" (Appendix D14).

Finding 23: The link is between organisational strategy and projects in the modernisation programme

Finding 24: There is no link between organisational strategy and procurement processes

IQ 2.1.2: Is there any alignment in the planning of procurement and project management processes?

The research shows that there is an alignment in the procurement plans in certain divisions in the organisation. Sometimes the alignment will be called when required, for example, budget planning.

According to P3, P8, and P11, there is no alignment. "No, what we do is we don't plan with Supply Chain, but what we do, we communicate the list of projects and how those projects will be executed" (P3, Appendix D3). P8 and P11 agree with P3 that project managers plan alone. Apparently, something happened that forced the PRASA Technical division project managers to plan with the SCM department during the 2016 financial year. P8 noted that they "usually plan alone; however, I think this year we have had a situation where we had to include Procurement where we had to even to have a procurement dashboard of our projects from planning level till execution... It's not a natural process" (Appendix D8).

According to P6, "the only time SCM starts planning and working hand-in-hand with project managers is when project managers basically invite SCM to sit in on their budgets [and] their planning wish list" (Appendix D6).

According to P7, P9, and P10, there is alignment in terms of the planning of the procurement processes between project managers and the SCM department. P7 agree that there is alignment, as he advised project managers to work with the SCM department when planning projects: "Supply Chain, yha, yha, yha. I always say when I advise any project manager there is no way you can do your project without Supply Chain, because supply chain takes a percentage at your initiation" (Appendix D7). P9 and P10 agree with P7. P9, from the SCM department, argued that, "we do them together because that procurement plan is owned by us and them" (Appendix D9). P10 argued that, "If you look behind you, there is that chat behind the wall; it's a procurement plan which we have developed for the bridges around the country. Unfortunately is been overtaken by time" (Appendix D10). In clarification, P10 explained that, "our Supply Chain department is understaffed… We've got one contracts manager who is overseeing all the projects at PRASA Tech, which is not healthy for the organisation because you lose all your delivery times" (Appendix D10).

Finding 25: There is no alignment between the planning of procurement and project management processes

Finding 26: PRASA Technical procurement planning was unsuccessful

IQ 2.1.3: Is there any project delivery method adopted by the organisation?

According to P2, the method depends on the complexity of the project: "The nature is predominantly determined by the complexity" (Appendix D2). The most common project management methodology used is 'design and build'. P2 said that, "we've developed a user requirement and based on that, the contractor goes and designs

and build, so it's a design and build… signalling project is a design and build" (Appendix D2). The signalling project is part of the modernisation programme and it is a capex project. P2, P3, P7, and P10 agree that they use the design and build methodology. P3 argued that, "the other method we use is the ten key project methodology, which is design and build. You appoint a contractor, a consortium that will design and build. In that consortium you've got consultants, or rather the professionals, that will design the structure; as the structure gets produced then the contractor begins with the construction immediately" (Appendix D3). P3 is also using other methods. "We use the standard one, which is the principal building agreement, which is based on the design bid and build" (Appendix D3). In clarification, P3 explained this method by saying: "You get the professionals to design, and then you take that design out to tender, and then you get the contractor to build" (Appendix D3). P10 supports P3 in using the 'ten key project method'. P10 argued that, "the nearest to design build and operate is our ten key projects" (Appendix D10).

Finding 27: 'Design and build' is the common project management method

SRQ 2.2:   In the ERP system, is there a capability to integrate business processes?

IQ 2.2.1: Which mechanisms should be used to design an integrated process system?

According to the research outcomes, 12 of the 14 participants agree that the organisation has SAP as an ERP system that can perform the integration. P2 believes in IMS (Integrated Management System) as the mechanism: "I guess you could say it could be part of developing your integrated management system dealing with ISO and PMBOK as a standard, then you integrate those process [sic]" (Appendix D2).

The project management and procurement process integration on SAP might not be possible because, according to P2, P7, P10, and P14, the Project Management module is not configured on SAP.

The research outcomes show that the finance part of SAP is configured. P6 noted the following: "We basically only use SAP once the contract is concluded, once the tender is basically concluded" (Appendix D6). According to P7: "…because all the payments are processed on SAP" (Appendix D7). In clarification, P9 explained the functions they are performing on SAP: "We release orders on SAP, we load contracts for payments on SAP, and then we are able to run the spend [sic] on SAP" (Appendix D9).

P12 has a different view of the Project Management module on SAP: "The project management of SAP is not exactly what one is looking for. The project management of SAP is more focused on the accounting side of a project, let's put it that way" (Appendix D12).

In conclusion, P12 referred as follows to the RFP that has gone out on tender:

"Part of that RFP talks about whatever system that will be implemented must be able to integrate to SAP. What elements of integration are required would be something that is up for debate, but I think in most parts, project managers need to know what have been spent, what budget has been loaded, so things like that. The procurement processes are not mechanised also. The only mechanisation part is when the contract is awarded and it has to be loaded onto the system for payments only. The procurement processes are not mechanised in anyway" (Appendix D12).

Finding 28: SAP can be used as a mechanism to design an integrated process system

IQ 2.2.2: Does your IT infrastructure currently have the capability to implement process integration?

P8, P10, and P12 do not have confidence in the organisational IT infrastructure. "I don't have much trust" (P8, Appendix D8). P10 and P12 did not want to say much about IT infrastructure performance. P10 noted that, "I don't want to say much but I doubt" (Appendix D10). P12 argued: "I don't know. I can't comment other than the fact that we had challenges with the EPIC system and part of that was due to the network infrastructure, so I really cannot comment" (Appendix D12).

P14, from the IT department, disagrees with P8, P10, and P12. P14 believes that the infrastructure does have capability to implement. "Yes, it's got" (Appendix D14). According to P14, there are other SAP modules currently running on the current infrastructure: "We run a procurement module and we run a SRM module, which are SAP managing the supply chain procure to pay, that part is already running" (Appendix D14).

Finding 29: The organisation requires the IT network infrastructure to be upgraded

IQ 2.2.3: What role will Information Technology play in the designing and implementation of a collaborated process system?

Participants identified different roles that IT can play in designing and implementing a collaborated system. According to P1, "IT is supposed to be in the forefront in terms of process Re-engineering because with better processes you are able to the necessary efficiency that you need", and IT can do "process Re-engineering, training and technology" (Appendix D1). P2 and P9 believe in SAP. "I guess they should be responsible for [the] SAP software side, in other words, the SAP integration, that's their role as IT" (P2, Appendix D2). P9 is in support of what P2 said by indicating that the role of IT "is to ensure that SAP is upgraded" (Appendix D2).

According to P8, "IT can play a very big role in integrating the processes, but you need a lot of expertise and experience in that space" (Appendix D8). P8 clarified this by saying that the advantage of an integrated system is data sharing. P11 wants supporting tools from IT that will enable him to execute his projects efficiently: "To me, the IT department will provide the tools to make work easier and efficient" (Appendix D11). P11 further believes that the business must first understand the project management strategy that it wants to follow before bringing tools. P11 used EPIC as an example and argued that, "EPMO bought a tool called EPIC, I'm told, intended for use by every project manager. Did they use it? No" (Appendix D11). P14 clarified P11's statement by saying: "Our role is IT, we are the middle man. As I said, if finance wants VIP payroll we will advise them, and if they want it, they will have it. In our case, here it's more where we bring that analysis, business analysis skills" (Appendix D14).

Finding 30: IT can upgrade or activate process integration on SAP

4.8   Research findings

The aim of the study is to explore the misalignment between project management and procurement processes in the railway sector in South Africa. The researcher attempted to identify any misalignment between the processes, as well as understanding how the organisation will be able to align the two processes. The researcher also tested the knowledge of the project managers and procurement officials on these processes and determined their understanding of the consequences in an organisation when the two processes are not followed properly. The researcher then developed findings based on the interview answers from the fourteen participants. Findings were developed for each interview question asked to the participants (outlined in Appendix B).

For ease of reading, the findings are listed below, per research question. Based on the findings, themes have been developed in sub-section 4.10.

RQ1: **What factors affect the alignment between procurement and project management processes in the South African railway organisation?**

SRQ 1.1: What are the procurement processes being used for?

IQ 1.1.1: What is your understanding of organisational procurement policies and procedures?

Table 4.5: Findings for SRQ 1.1

Finding No.	Finding
1	The organisation does have procurement policies and procedures
2	On a regional level the procurement processes are understood differently than on head office level; not all the project managers know the process flow, and some participants have never seen the process diagrams
3	There is no alignment between procurement and project management processes
4	The two departments (Procurement and Project Management) do not take responsibility for the processes as they blame each other for wrong doings
5	There is a lack of procurement process knowledge on regional level
6	The organisation does not prioritise key projects
7	The naming of the supply chain committees at PRASA is not the same as the way it is named in the PFMA
8	BSC involves internal and external people; if external people are not paid, the committee suffers a quorum
9	The procurement processes are managed by the SCM department and the project managers are not involved in the process
10	There is a need for the procurement processes to be improved
11	Project managers are expected to use the new procurement policy with old processes and old procedures

SRQ 1.2: What project management processes are being used by the organisation?

IQ 1.2.1: What is your understanding of organisational project management policies and procedures?

Table 4.6: Findings for SRQ 1.2

Finding No.	Finding
12	The understanding of processes is different because the organisation does not have project management policies and procedures
13	There is no standard project management process
14	Project management tasks are manual
15	There is no project management standard accepted by the organisation
16	Project managers are following PMBOK

SRQ 1.3: What are the challenges that the organisation experiences with the procurement and project management processes?

IQ 1.3.1: What is the impact on the organisation for not meeting project deadlines due to failure in the project and procurement processes?

Table 4.7: Findings for SRQ 1.3

Finding No.	Finding
17	The organisation loses money due to legal battles and payment of penalties.
18	The organisation is not able to deliver on its mandate from government to provide a rail commuter service
19	The procurement or project management process owner faces no consequences
20	There is political interference with the processes
21	Forums were created but were unsuccessful
22	There is lack of commitment by the SCM department

RQ2: How can the parastatal organisation align the procurement and project management processes?

SRQ 2.1: How are the process tasks being performed by the organisation?

IQ 2.1.1: What is the linkage between the organisational strategy and procurement and project management processes?

Table 4.8: Findings for SRQ 2.1

Finding No.	Finding
23	The link is between organisational strategy and projects in the modernisation programme
24	There is no link between organisational strategy and procurement processes
25	There is no alignment between the planning of procurement and project management processes
26	PRASA Technical procurement planning was unsuccessful
27	'Design and build' is the common project management method
28	SAP can be used as a mechanism to design an integrated process system

SRQ 2.2: In the ERP system, is there a capability to integrate business processes?

IQ 2.2.1: Which mechanisms should be used to design an integrated process system?

Table 4.9: Findings for SRQ 2.2

Finding No.	Finding
29	The organisation requires the IT network infrastructure to be upgraded
30	IT can upgrade or activate process integration on SAP

4.9   Summary of findings and theme development

In this section the findings, themes, and RQs are linked and represented in Table 4.6 (findings and related themes linked to RQ1) and Table 4.7 (findings and related themes linked to RQ2).

Table 4.10: Findings and related themes linked to RQ1

RQ1:   What factors affect the alignment between procurement and project management processes in the South African railway organisation?

RQ1		Categories	Themes
Finding 1:	The organisation does have procurement policies and procedures	Procurement policy and procedures	Standard
Finding 2:	On a regional level the procurement processes are understood differently than on head office level; not all the project managers know the process flow, and some participants have never seen the process diagrams	A different understanding of procurement processes	Misalignment
Finding 3:	There is no alignment between procurement and project management processes	There is misalignment between procurement and project management processes	Misalignment
Finding 4:	The two departments (Procurement and Project Management) do not take responsibility for the processes as they blame each other for wrong doings	Project managers have a problem with timelines that are not defined in the procurement processes	Misalignment
Finding 5:	There is a lack of process knowledge at a regional level	Knowledge of processes differs from Head Office to the regions	Misalignment
Finding 6:	The organisation does not prioritise key projects	Prioritisation of specific key projects	Special dispensation
Finding 7:	The naming of the supply chain committees at PRASA is not the same as the way it is named in the PFMA	All 14 participants agree that the organisation is using all the committees enshrined in the PFMA	Standard
Finding 8:	BSC involves internal and external people; if external people are not paid, the committee suffers a quorum	External people who are part of BSC cause delays	Process re-engineering

RQ1		Categories	Themes
Finding 9:	The procurement processes are managed by the SCM department and the project managers are not involved in the process	Project managers do not become involved in the procurement processes	Misalignment
Finding 10:	There is a need for the procurement processes to be improved	P7, P8, and P11 complained that the turnaround time of the procurement processes is too long; they need the process timelines to be improved	Process re-engineering
Finding 11:	Project Managers are expected to use the new procurement policy with old processes and old procedures	The old procurement processes are still being used even after the new policy has been signed	Misalignment
Finding 12:	The understanding of processes is different because the organisation does not have project management policies and procedures	Project managers are using their knowledge from previous experiences	Misalignment
Finding 13:	There are no standard project management processes	P14 argued that the absence of a project management process is a challenge	Process re-engineering
Finding 14:	Project management tasks are manual	According to P1, P2, P3, P4, P5, P8, P10, P11, and P12, the project management processes are manual	Process re-engineering
Finding 15:	There is no project management standard accepted by the organisation	There is no standard process being used; it depends on the knowledge that each individual possesses	Standard
Finding 16:	Project managers are following PMBOK	Upon completion of their studies, project managers talk about PMBOK and they try to apply it	Standard
Finding 17:	The organisation loses money due to legal battles and payment of penalties	7 of the 14 participants pointed out that the delays can cost the organisation high amounts of money	Process re-engineering
Finding 18:	The organisation is not able to deliver on its mandate from government to provide a rail commuter service	P11 argued that, "the business does not deliver on its objectives, simple"	Business management
Finding 19:	The procurement or project management process owner faces no consequences	Companies that are State-owned do not fire; instead, they redeploy a person	Consequence management
Finding 20:	There is political interference with the processes	State-owned companies do not fire project managers for failing the process; instead, they redeploy people	Business management
Finding 21:	Forums were created but were unsuccessful	A project management forum was held on a quarterly basis; it fell away, especially with the changing management	Information management
Finding 22:	There is lack of commitment by the SCM department	SCM pulled out of these meetings	Information management

Table 4.11: Findings and related themes linked to RQ2

> **RQ2: How can the parastatal organisation align the procurement and project management processes?**

RQ2		Categories	Themes
Finding 23:	The link is between organisational strategy and projects in the modernisation programme	The project selection criteria are derived from an organisation's strategic goals	Alignment
Finding 24:	There is no link between organisational strategy and procurement processes	There is no linkage at all; if there were a link, procurement would know that this project can be useful and it has to be delivered as such; they know the time-frames	Misalignment
Finding 25:	There is no alignment between the planning of procurement and project management processes	The only time SCM starts planning and working hand-in-hand with project managers is when project managers invite SCM to sit in on their budgets and their planning wish list	Misalignment
Finding 26:	PRASA Technical procurement planning was unsuccessful	The procurement plan was prepared hand-in-hand with the SCM department, but time caught up with them. In clarification, P10 explained that the Supply Chain department is understaffed	Business management
Finding 27:	'Design and build' is the common project management method	You get the professionals to design and then you take that design out to tender and then you get the contractor to build	Standard
Finding 28:	SAP can be used as a mechanism to design an integrated process system	Twelve (12) of the 14 participants agree that the organisation has SAP as an ERP system able to perform the integration	Alignment
Finding 29:	The organisation requires the IT network infrastructure to be upgraded	We had challenges with the EPIC system and part of that was due to the network infrastructure	IT infrastructure
Finding 30:	IT can upgrade or activate process integration on SAP	"I guess they should be responsible for [the] SAP software side, in other words, the SAP integration, that's their role as IT"	Alignment

4.10 Themes

For the interview questions that have been answered, 29 findings were identified. Of these 29 findings, nine (9) themes have been developed, which are as follows:

I.   Standard

II.   Misalignment

III. Special dispensation

IV.   Process re-engineering

V.   Business management

54

4.10.1 Themes linked to findings

In this section, the identified themes are linked to the findings per research question.

Table 4.12: Themes linked to finding number and RQ1

Themes	Finding No.	RQ1
Standard	1	RQ1: SRQ 1.1, IQ 1.1.1
	7	RQ1: SRQ 1.1, IQ 1.1.4
	15	RQ1: SRQ 1.2, IQ 1.2.4
	16	RQ1: SRQ 1.2, IQ 1.2.4
Misalignment	2	RQ1: SRQ 1.1, IQ 1.1.1
	3	RQ1: SRQ 1.1, IQ 1.1.2
	4	RQ1: SRQ 1.1, IQ 1.1.2
	5	RQ1: SRQ 1.1, IQ 1.1.3
	9	RQ1: SRQ 1.1, IQ 1.1.5
	11	RQ1: SRQ 1.1, IQ 1.1.6
	6	RQ1: SRQ 1.1, IQ 1.1.3
Process re-engineering	8	RQ1: SRQ 1.1, IQ 1.1.4
	10	RQ1: SRQ 1.1, IQ 1.1.6
	13	RQ1: SRQ 1.2, IQ 1.2.2
	14	RQ1: SRQ 1.2, IQ 1.2.3
	17	RQ1: SRQ 1.3, IQ 1.3.1
Business management	18	RQ1: SRQ 1.3, IQ 1.3.1
	20	RQ1: SRQ 1.3, IQ 1.3.1
Consequence management	19	RQ1: SRQ 1.3, IQ 1.3.1
Information management	21	RQ1: SRQ 1.3, IQ 1.3.2
	22	RQ1: SRQ 1.3, IQ 1.3.3

Table 4.13: Themes linked to finding number and RQ2

Themes	Finding No.	RQ2
Standard	27	RQ2: SRQ 2.2, IQ 2.1.3

Misalignment	12	RQ1: SRQ 2.1, IQ 1.2.1
	24	RQ2: SRQ 2.1, IQ 2.1.1
	25	RQ2: SRQ 2.1, IQ 2.1.1
Business management	26	RQ2: SRQ 2.1, IQ 2.1.2
Alignment	22	RQ1: SRQ 2.2, IQ 1.3.3
	28	RQ2: SRQ 2.1, IQ 2.1.3
	30	RQ2: SRQ 2.2, IQ 2.2.2
IT infrastructure	29	RQ2: SRQ 2.2, IQ 2.2.1

4.11 Conclusion

The findings show that there is misalignment between procurement and project management processes in the South African parastatal organisation. The misalignment is in the form of the participants' process knowledge within their regions and at Head Office. The participants at Head Office possess more process knowledge. As indicated with finding 20, one of the key factors is attributed to the political interference in the state-owned organisation. The political interference has led to the absence of consequence management by the individuals who fail to uphold the processes. Project managers and procurement officials now have to circumvent the procurement legislations and regulations to accommodate this influence. Another key factor is the ever-changing management of the organisation. Each time management changes, decisions also change.

The research outcomes furthermore indicate that EPMO does not have any designed and accepted project management processes for the organisation. However, there have been attempts by EPMO to bring in an EPIC system to assist project management in working efficiently, but the system is not used. It is noted that inadequate executive support is the challenge in parastatal organisations. The EPIC system suffers executive support. EPMO approves projects that are aligned to the organisation's strategic objectives, but there are still delays that cost the organisation large amounts of money. The delays are expected, as there are no special procurement processes for capital projects. Attempts have been made by divisions to reduce the delays on projects by means of interface meetings between project managers and the SCM department, but it failed.

Finally, the researcher developed nine themes from the 30 findings and the two primary research questions. These themes, together with the primary research questions and sub-questions, are discussed in Chapter Five.

CHAPTER FIVE: DISCUSSION
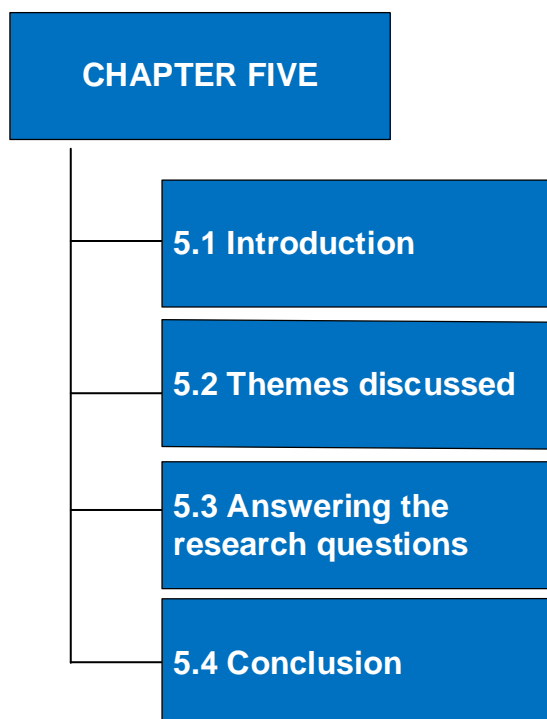
Figure 5.1: Format for Chapter Five

5.1 Introduction

The previous chapter presented 30 findings from 14 participants in the railway organisation in South Africa. Participants included project managers, and supply chain officials, with PRASA as case study. This chapter summarises the study findings according to the nine themes developed from the data in Chapter Four, provides recommendations to the organisation, and makes suggestions for further research. Themes are discussed and linked to the research questions and the aim of the study. The nine themes are:

    i)   Standards

    ii)   Misalignment

    iii)   Special dispensation

    iv)   Process re-engineering

    v)   Business management

    vi)   Consequence management

    vii)   Information management

    viii) Alignment

    ix)   IT infrastructure

For the ease of the reader, the problem statement, research questions, and aim of the study are stated below:

Problem statement: The non-alignment of procurement and project management processes leads to unsuccessful project delivery or late delivery and it is unclear why organisations do not align procurement and project management processes.

RQ1: **What factors affect the alignment between procurement and project management processes in the South African railway organisation?**

RQ2: How can the parastatal organisation align the procurement and project management processes?

Aim of the study: The aim of the study is to explore the strategic alignment between procurement and project management processes in the railway sector in South Africa.

5.2   Themes discussed

5.2.1   Theme 1: Standards

A standard is an agreed way of doing something. The standards discussed in this chapter are both for project and procurement management. The most commonly used project management standards in South Africa include PMBOK, Prince 2, and ISO 9000. Rehacek (2017) notes that the most used standards for project management is PMBOK and Prince 2. Varajao, Palacios and Silva (2016) advises the use of ISO 21500:2012 by the parastatals for any time of a project. Varajao et al notes that, ISO 21500:2012 is based and aligned with PMBOK 5. Therefore, same as PMBOK 5, ISO 21500:2012 provides guidance on processes of project management and they follow the same process groups of initiating; planning; implementing; controlling; and closing. Finding 16 states that project managers are using PMBOK. According to Zwikael (2009), PMBOK is not only popular in SA, but worldwide. Sanjuan and Froese (2013) support Zwikael (2009) in confirming that "the standards include the PMBOK by the Project Management Institute, the International Project Management Association (IPMA) Competence Baseline (ICB) by the International PM Association, ISO 9000, and Prince2 by The Office of Government Commerce UK".

Ahlemann, Teuteberg and Vogelsang (2009:1) argue that "generally, standards are only rarely used in project management in Germany and Switzerland. And if standards are indeed used, they are rarely used 'as is'; in fact, they are usually modified or adapted before application". Finding 15 reveals that the organisation does not have project management standards at all. Therefore, it is likely for the organisation to have unsuccessful project delivery due to the absence of standards. According to

Neyestani and Juanzon (2017) ISO 9001 is a systematic approach and it can be a part of any project management processes from the project initiation up to the final steps in the project closure.

According to Badenhorst-weiss (2012), procurement by parastatals is governed by a number of 'pieces' of standards. South Africa is using the Public Finance Management Act No. 1 of 1999 and the Preferential Procurement Policy Framework Act No. 5 of 2000. According to Chelangat, Ombui and Omwenga (2015), the key core points of reference in the parastatals in Kenya are the Public Procurement and Disposal Act of 2005, and subsequent regulations released in 2006 and 2009. Mrope (2018) conducted a procurement performance study in the parastatals of Tanzania. The researcher reveals that there were no procurement standards in Tanzania. The Tanzania Public Procurement Act No 21 of 2004 was only established in 2004. The Supply Chain Management (SCM) regulations in terms of the Public Financial Management Act (PFMA) lay down requirements for the governance of procurement processes (Badenhorst-weiss, 2012). Watermeyer (2011) recommends that each parastatal has to determine its own procedures and policies, which are consistent with legislative standards. The organisation in this study does have some procurement standards. Therefore, the organisation is complying with National Treasury regulations, but delays are still happening. There are disruptions in following the standards properly. Even so, Mrope (2018) still recommends that parastatals must comply to the standards. In Kenya, there are also cases reported by the Public Procurement Oversight Authority (PPOA) with regard to procurement malpractices and the lack of adherence to laid out standards (Chelangat et al., 2015).

5.2.2   Theme 2: Misalignment

Misalignment between procurement and project management is identified in the supply chain management study conducted in 2014 in Malaysia (Riazi & Riazi, 2014), where the authors noted that there is a disproportion between those who prepare papers and those who execute the project. The finding resonates with the findings of this study where the organisation has separate planning processes for project managers and the SCM department. According to P2, the separation of powers is stipulated clearly in the organisation's supply chain policy. However, Thunberg, Rudberg, and Gustavsson (2014) argue that project planning problems are the sub-category of supply chain planning problems. It therefore makes sense to coordinate the planning processes of project and procurement management. Thunberg et al. (2014) show a misalignment in scheduling errors, which becomes a problem for both project managers and the SCM department because they are both affected.

The key people involved in projects at the organisation have different understandings of the application processes (findings 2 and 12), resulting in delays and project failures.

5.2.3   Theme 3: Special dispensation

The research shows that the organisation does not have special procurement processes to accommodate the procurement in modernisation programmes. The ordinary procurement policy is used for the new modernisation programmes that the organisation has embarked on. The organisation is currently refining its procurement policy, but there is no special procurement dispensation for mega projects on the new policy. The policy has been revised after the former Public Protector of South Africa (Adv. Thuli Madonsela) picked up, among other things, tender irregularities at the organisation in August 2015. The revised policy is an attempt to counter the irregularities. The information is captured in a report named "Derailed".

According to Woolcock and Grier (2015), the EU and US entered into regional agreements with procurement commitments under Government Procurement Agreement (GPA) negotiations. This is a special procurement dispensation and procurement rules are set. Kenya is using sustainable procurement to promote the goals of social, environment, and economic sustainability in government parastatals (Chelangat et al., 2015). The challenge of sustainable procurement in Kenya is to integrate environmental and social considerations into procurement processes. The reason for this, according to the research conducted, is that the trade-offs between environmental, social, and economic considerations are not always easy to understand. As in SA, Kenya does not have a special dispensation. Baldi, Bottasso, Conti and Piccardo (2016) conducted a study to investigate the possibility of a negotiated procurement process in Italian municipalities, particularly for mega projects. The main results of that study suggest that projects that are more complex are more likely to be procured using negotiated procedures. It makes sense to negotiate for mega projects, as they are faced with delays and cost overruns. Rahman et al. (2013) argue that one of the main factors causing cost overruns in Malaysian construction projects is the fluctuation of material prices. This can be avoided by a special procurement dispensation where material prices are negotiated and agreed upon. As indicated in finding 6, the organisation has not prioritised key projects, and these are projects in the modernisation programme. Organisations continue as if these are normal projects without realising that it is a change in a situation that is bigger than usual; thus, a special procurement dispensation should have been arranged during the planning phase to avoid delays.

5.2.4 Theme 4: Process re-engineering

According to Nisar, Ahmad and Ahmad (2014), the main purposes of process re-engineering include improvement in strategic process policies as wel as improvement in the system and structure of the organisation. This statement relates to the aim of the study, namely exploring strategic alignment between procurement and project management processes. Xiang, Archer and Detlor (2014) describe process re-engineering as a radical redesign of business processes resulting in a singular transformation. Nisar et al. (2014) supports Xiang et al. (2014) by saying that process redesign brings radical change in the organisation. Huang, Lee, Chiu and Yen (2014:1) define process re-engineering as "an approach for business process transformation and reshaping of business processes with the involvement of IT". In the case of this study (the railway organisation), there are procurement processes, but a reshape is required. P7, P8, and P11 complained about the slow timeframes of the current procurement processes. Project management processes need to be designed from scratch. Huang et al. (2014) recommend process re-engineering to improve quality and to reduce costs. Therefore, cost overruns on projects may be eliminated if processes can be reshaped.

According to the literature, top management must support process re-engineering. P12 is complaining about the changing of management in the organisation and this could have an impact on process redesign. Palma-mendoza, Neailey and Roy (2014) highlight that meetings regarding presentations and decisions to be agreed upon with regard to the reshaping of processes, should be held with management. With the changing of management, some decisions can suffer and end up not being implemented. Xiang et al. (2014) support Palma-mendoza et al. (2014) by stating that top management support is an important enabler for BPR project success. Palma-mendoza et al. (2014) also highlight the importance of top management commitment and vision for decision making on conducting process re-engineering.

Literature shows that process re-engineering is supported by IT. Xiang et al. (2014) argue that processes cannot work well unless IT support is suitable. Nisar et al. (2014) support Xiang et al. (2014) by saying that IT plays a significant role in business process re-engineering. Huang et al. (2014:2) also support Xiang et al. (2014) and Nisar et al. (2014) by saying: "IT has played such a vital role in the success of the overall re-engineering process by the smooth flow of information to improve the integration". Therefore, process re-engineering cannot be possible without IT assistance. The importance of IT in BPR is problematic at the organisation used for this study, as interviewed participants do not have confidence in the current IT

management and infrastructure. This does not bode well for the possible alignment of projects between PM and SCM.

5.2.5   Themes 5 and 9: Business management and IT infrastructure

There are a number of studies conducted on business and IT alignment. Government, as owner of the parastatals, calls these parastatals state-owned enterprises (SOEs). Cuervo-Cazurra, Inkpen, Musacchio and Ramaswamy (2014) explain the existence of parastatals as a political strategy of government officials. The mandate that the parastatals are carrying is from government. Specific high placed positions in parastatals are political appointments with the resulting political influence in strategies and decision making. Cuervo-Cazurra et al. (2014) is of the view that parastatals are managed by political appointees. According to finding 20, there is political influence on the processes. A political interference is therefore likely to occur if managers are politically appointed. South Africa's former Public Protector identified tender irregularities and maladministration at the organisation. This is possible especially if there are manual procurement processes and a misalignment between entities.

 IT infrastructure is always regarded it as an expensive investment. Morgan and Ngwenyama (2015) argue that these investments do not meet business senior managers' expectations. Kumar (2004:14) gives clarification on investment by saying that, "the value of the IT infrastructure investment will be realised by the degree to which it is used". Maintenance costs of the ERP system increase annually, and according to Morgan and Ngwenyama (2015), an organisation that does not fully utilise the package it pays for will not realise the investment.

Kumar (2004) as well as Roberts and Grover (2012) refer to IT infrastructure as a collection of shared technologies. These shared technologies include data storage, network connectivity, telecommunications, and software applications. Kumar (2004) argues that there exists a 'people side' to IT infrastructure, meaning that infrastructure architects and all other employees in the IT space are responsible for infrastructure design and infrastructure support. Furthermore, Kumar (2004:1) defines IT infrastructure as "processes that facilitate extensive connectivity". In support of this definition, Roberts and Grover (2012) note that the aligned processes enable the flow of information throughout the organisation. This means that if procurement and project processes are aligned, data will be shared across the organisation.

The shared technologies require IT infrastructure that is reliable, meaning it must be available at all times. The designers need to create redundancy to re-route all traffic through an alternate network. IT infrastructure must be flexible and upgradable.

Morgan and Ngwenyama (2015) argue that it is important for organisations to upgrade the infrastructure continuously in order to improve productivity. Both Kumar (2004) and Morgan and Ngwenyama (2015) are of the view that IT infrastructure is an investment to the organisation. It therefore makes sense when Morgan and Ngwenyama (2015) say it must be upgraded on a continuous basis. In the case of this study, participants do not have confidence in the current IT infrastructure and require an upgrade.

5.2.6   Theme 6: Consequence management

Consequence management is important. There needs to be a consequence for decisions made. Goldeng, Grünfeld and Benito (2008) conducted a study on the performance between parastatals and privately-owned organisations. The findings revealed that performance in parastatals is weaker that in the privately-owned organisations. Participant 7 is of the view that there is political influence in the parastatal (PRASA). According to the studies conducted on the performance of parastatals or public service, the political influence is always appearing as a reason for organisations' weak performance. According to Cuervo-Cazurra et al. (2014), the existence of parastatals is a result of the ideology and the political strategy of government officials regarding private ownership of particular productive assets. Therefore, if parastatals are a political strategy, it is most likely to find political influence. Kanyane and Sausi (2015) also support the notion of political influence in parastatals, but state that it is not unique to SA. The authors used Italy as an example where parastatals such as the railways, postal service, and public transport are all influenced politically in Italy. This provides confirmation that political influence is weakening the performance in parastatals.

As mentioned by the participants, there are no consequences in an event that processes are not followed correctly; instead, a person is redeployed. Furthermore, Kanyane and Sausi (2015) argue that the parastatals in SA are not performing well; even their legislative frameworks are fragmented and they are vulnerable to corruption problems. There is a lack of consequence management in the organisation, resulting in poor performance by the employees. The authors are complaining about maladministration and other forms of improper conduct at the case organisation.

West and Blackman (2015) conducted a study on the performance of an Australian public service organisation and discovered that the challenge is the non-alignment of performance to the strategic goals of the organisation, which is similar to this study. Buick, Blackman, O'Donnell, O'Flynn and West (2015) support the alignment of individual performance to the strategic goals of the organisation.

63

5.2.7   Theme 7: Information management

Initiatives have been taken by different programme managers in different divisions to create information sessions between project managers and supply chain officials. The aim of these sessions is to eliminate or deal with bottlenecks in procurement processes. The processes seem to be taking longer than expected. According to Cooke-Davies (2002), project management knowledge networks have been created in Australia, Europe, and North America. The aim of these networks is to learn how to improve on project management processes. It is evident that the knowledge networks became a success because the study shows that the networks have grown.

The PMO in the organisation initiated an information session called a project management forum, which is held quarterly. In this forum, project managers and SCM are represented. Some of the participants in the organisation see the forum more as a platform to deal with challenges that project managers and SMC officials have. Wiewiora (2013) regards the knowledge session at project management level as a social communication, with the participants seeing no value in the PMO information sessions. The project management forum failed because it lost support from the changing (new) management. It can be because the forum adds no value to the success of project implementation in the organisation.

Finding 22 indicates a lack of commitment from SCM in all the project management forums that have been initiated. P7 states that, "I always say when I advise any project manager there is no way you can do your project without Supply Chain" (Annexure D7). The result could be attributed to the absence of consequence management in the organisation. Amasingly, despite numerous attempts from SCM to meet and engage in discussions with project managers, it is commitment from SCM that is lacking.

According to Riazi and Riazi (2014), several researchers have shown the benefits of SCM for effective project management. One of these researchers is Turner (1993). If P7 says there is no way a project can be successful without SCM commitment, and researchers show the benefits of such a commitment, then SCM needs to engage with project managers. The absence of engagement can lead to delays. Collaboration by all parties involved in the project is encouraged by Riazi and Riazi (2014) to prevent any bottlenecks that can lead to project delays, including issues such as non-payment.

5.2.8 Theme 8: Alignment

Similar studies on alignment between business processes and IT have been done before. As observed by Chan and Reich (2007), early studies on business and IT alignment often refer to this as an alignment between business plan and IT plan. Chen et al. (2013) documented a study on the capability of IT on business process agility and environmental factors. Mikalef and Batenburg (2014) focus on business alignment in the procurement domain. This study is focusing on aligning procurement and project management processes by means of IT assistance. Kahre, Hoffmann and Ahlemann (2017) focuses beyond business-IT alignment by looking on the relevance of digital business strategies that will replace the demand for business-IT alignment. The reason for this was that, the researcher realised a gap in the digital business strategies.

The case organisation is also aligning its projects to the strategy of the organisation. According to Alsudiri, Al-Karaghouli and Eldabi (2013), companies having a strong alignment between their business strategy and project management show successful project outcomes, while companies with a mismatched alignment show less successful project outcomes. The case organisation does not show successful outcomes on projects even though the projects have a strong link to the business strategy. Some internal factors have been mentioned by participants during interviews, including the lack of support from executives and the changing of management. Luftman (2000) argues that achieving alignment requires strong support from senior management. Jooste and Fourie (2009) support Luftman (2000) by stating that the lack of support from the organisation's top management is a major barrier to successful strategy implementation. The misalignment is causing the organisation not to be able to deliver on its mandate. Mikalef and Batenburg (2014) indicate that IT must be congruent in terms of strategy and operations. Li, Liu, Belitski, Ghobadian and O'Regan (2016) argues that, organisations that aligns their business and IT strategies are more possible to succeed.

Studying alignment in businesses is always exiting. In most BP alignment studies, IT is always present. This shows the importance of IT in business processes.

5.3 Answering the research questions

RQ1: What factors affect the alignment between procurement and project management processes in the South African railway organisation?

The research reveals several factors affecting the alignment between project and procurement management processes. According to Akira and Simba (2017) a good

project performance depends on procurement planning. An example of these factors is the absence of integrated planning between project managers and procurement officials. This could be attributed to the fact that the procurement policy encourages a segregation of duties between project managers and procurement officials. Participant 7, a senior project manager, is of the view that SCM must be involved when a project manager is developing a project plan. Literature supports this view.

Another important factor is the absence of standard project management processes throughout the organisation and its divisions, even though project managers are familiar with standards such as PMBOK and ISO. Some project managers have developed project management processes for their departments and some are using Excel spreadsheets to register their projects. Process alignment cannot be possible without processes. The procurement processes are available but cannot be aligned. As much as the procurement processes are available, not everyone knows how these processes flow. That is why Owuoth and Mwangangi (2015) says, procurement processes in the government owned institutions is stained with inadequacies.

The last factor discovered during the research is the lack of commitment by the SCM department to integrate meetings.

RQ2: How can the parastatal organisation align the procurement and project management processes?

The research shows that there is no alignment of procurement and project management processes in the organisation. The organisation has installed SAP, but not all the modules are active. The majority of participants feel that if SAP can be utilised fully, then maybe process alignment will be possible. According to Luftma, Lyytinen and Zvi practitioners and academics a significant evidence has been gathered regarding the positive impact of IT and business process alignment on business performance. On the other hand, participants 2 and10 are of the view that if the organisation can follow ISO standards, then alignment will be possible. Amongst ISO 9001 internal benefits mentioned by Casadesús, Heras, and Ochoa (2000) the authors identified the improvement in increased involvement of people. Fonseca and Domingues (2016) argues that, the reinforcement approaches in ISO 9001:2015 have strengthened the alignment.

Alignment is only happening in the procurement legislation. Procurement officials are following National Treasury's guidelines. It is evident from the research that the projects being implemented by the organisation are linked direct to the strategy of the organisation.

The fact that processes are performed manually can make alignment impossible. Again, the absence of standard processes is a challenge because each participant is using a different method to execute projects. The biggest misalignment is perceived to be in the planning phase where project managers and procurement officials are planning separately. Planning is suggested to be a joint process for the smooth implementation of a project.

Aim of the study: The aim of the study is to explore the strategic alignment between procurement and project management processes in the railway sector in South Africa.

Areas where misalignment exists have been identified by participants during interviews.

5.4   Conclusion

Chapter Five discussed the themes developed from the 30 findings that were identified in Chapter Four. The hard work has led to the detection of nine themes, discussed in this chapter. The researcher discussed the themes citing from recent literature. Some of the themes are combined into one discussion, for instance, misalignment and alignment, because of the commonalities of these themes.

Lastly, the two research questions were answered and the aim of the study was explained.

This next chapter provides the conclusion of the study, which includes recommendations, a reflection, the research contribution, research limitations, and suggestions for future research.

5 CHAPTER SIX: CONCLUSIONS AND RECOMMENDATION
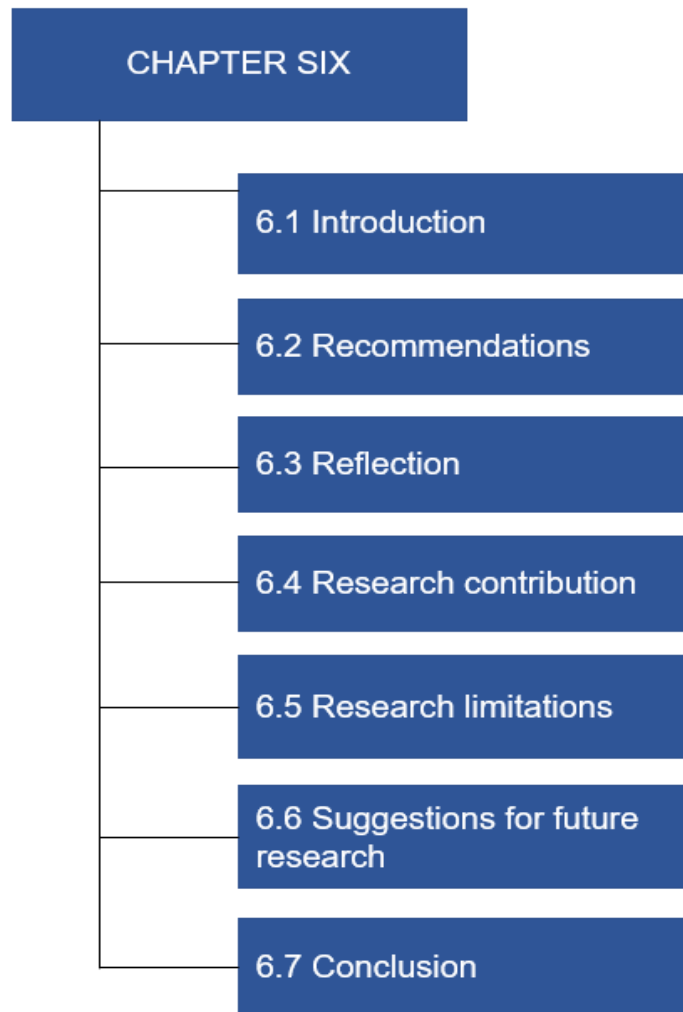
Figure 6.1: Format for Chapter Six

6.1 Introduction

This study specifically seeks to explore the strategic alignment between procurement and project management processes in the railway sector in South Africa. Despite the well-documented studies of misalignment, it appears that the alignment issue still exists.

In an attempt to understand the reasons causing the misalignment in the railway organisation, the study discovered the following reasons:

i) Absence of policies and processes
ii) Absence of clear consequence management
iii) Political interference in the business administration of the parastatal
iv) Lack of executive management support

6.1.1 Absence of policies and processes

It is highly likely that misalignment exists in the absence of policies and processes in an organisation. Project managers are executing projects using different processes, not in a standard, agreed upon way. This is creating misalignment. They do this because there are no standard project management processes in place. A policy is a guiding document, and a documented process has several steps on how to perform tasks.

6.1.2 Absence of clear consequence management

Staff should be held accountable for deviating from a process or procedure. The absence of consequence management creates chaos. The question is, how do you hold people accountable for processes that do not exist?

6.1.3 Political interference in the business administration of the parastatal

The organisation needs to find a way to separate politics from the administration of the organisation. Politicians are manipulating procurement processes within the parastatals. Those that are involved are not facing any consequence because they are protected by the politicians in the organisation.

6.1.4 Lack of executive management support

The lack of executive support destroys the initiatives of the organisation. Executive management are the key stakeholders of a project. Poor executive management support is the reason why projects fail, as the role of senior management touches on corporate culture, which is vital to the success or failure of projects. It is important that a project manager understands the project in detail. To ensure that project managers remain engaged throughout the project lifecycle, they need to be involved in executing the project.

6.2 Recommendations

The research results indicate misalignment concerns and issues with the procurement and project management processes that need to be addressed. In order to address these concerns and issues, the recommendations focus on dealing with certain critical aspects that are lacking in the organisation, such as well-documented project management policies and procedures, consequence management, management support, and separating politics from administration.

6.2.1 Well-documented project management policies and procedures

Firstly, this study recommends that a well-documented project management policy and procedure document aligned to the strategy of the organisation be developed with the assistance of IT. This will offer the organisation a mechanised process, thereby

making it easy to deal with performance or consequence management. It will also assist the organisation in avoiding inconsistencies. A policy manual should be a single and reliable source of guidance that can be used by the organisation when making decisions. Project managers and procurement officials should work in accordance with the company policies and procedures. Currently, project managers and procurement officials are using their own personal discretion, which creates inconsistency. Clear written and followed processes will lessen the impact the organisation is facing due to processes that are not being followed by project managers and procurement officials. Clear written policies and procedures also provide legal footing for the organisation if challenged in court. These types of situations illustrate why clear, documented processes should provide maximum consistent results to the organisation in terms of project delivery.

6.2.2   Clear documented consequence management

Once the organisation has well-documented policies and procedures, it will be easy to perform consequence management should the processes not be followed accordingly. Performance will be managed based on the process, and good performance will lessen the impact the organisation is currently facing. The study has revealed that political influence in the parastatals is leading to the absence of consequence management. It can be a difficult situation having to deal with applying consequence management in the parastatals in this current situation. Therefore, it is recommended that a strong mechanism be established to separate business from politics.

6.2.3   Executive management support is required

It has been reiterated in many studies that management support is vital to the successful delivery of a project. The research shows the absence of executive management support with the EPIC project management tool, which has led to project managers not using this tool. Project managers, on the other hand, are complaining that this tool does not integrate effectively with other systems like SAP; EPIC is more manual.

A current problem in the organisation is the changing of management. None of the key executive positions is filled permanently; all persons in these positions are acting. It might happen that an executive does not support a decision because it was made by the previous executive. Permanent employment or long-term contracts for executive management are required for the smooth incorporation of processes and IT. To avoid wasteful expenditure, it is recommended that decisions on projects are

supported by executive management because these projects require huge amounts of money.

6.3 Reflection

This research project was a qualitative study that sought to explore process misalignment in the railway sector in South Africa. Fourteen (14) participants were interviewed instead of the 15 originally identified for the study. Nine (9) themes were derived from thirty (30) findings.

There were challenges that I experienced during interviews, for example, people were not responding to my emails on requesting interviews, and most of the interviews had to be conducted in Johannesburg and Pretoria. Some participants literally refused to be interviewed and some ignored my interview requests. I had no exact appointments and time slots; it was office walk-ins, and I had to determine the participants' availability one-by-one. The participants were aware of the interviews to be conducted in that week. I communicated the dates via email well in advance to avoid a surprise visit. Another reason for my email communications to participants was to prepare them for the interviews in terms of expecting me and being ready.

Before an interview, a participant would be assured of the high degree of confidentiality of the information. Regardless, some of the participants were reluctant to state certain information on record, especially on supply chain related questions due to the sensitivity of such information, and despite me sharing with them a letter of consent signed by the organisation. Participants preferred to provide broad-level information instead of the details that I was looking for. Thirty (30) findings and nine (9) themes were developed.

It was surprising to discover that multi-billion projects or mega projects in the modernisation programme were implemented without standard project management policies and procedures. Secondly, how does a company implement such projects using an ordinary procurement processes without having a special procurement dispensation? This means the organisation does not have a programme management approach. Projects in the programme are not the same as the normal day-to-day projects; it is a change in a situation that is much bigger than usual. All the projects in the modernisation programme were behind schedule. The organisation was not able to deliver on its mandate from government. These massive delays were the reasons that inspired me to conduct the research. Project managers and procurement officials were blaming each other's processes. I decided to explore the misalignment between the project and procurement management processes. I discovered that there is no

71

project management policy and procedure document in the organisation. There is also no programme management approach available. Project managers are using their own personal discretion to implement projects.

6.4   Research contribution

This research contributes towards the body of knowledge specifically in the business process field. The contribution is a proposed integrated process for projects to be delivered on schedule and on budget.

6.5   Research limitations

The study was limited to a railway organisation in South Africa. Findings are generalised specifically for this organisation. The organisation operates in four regions but the study was conducted in two regions, namely the Western Cape Region and the Gauteng Region.

This study focused on exploring the project and procurement management processes that could be the causing project delays in the modernisation programme. The study also looked at how IT might assist in optimising these processes. Therefore, only the two affected departments were interviewed. The study has not proposed a solution to the problem.

6.6   Suggestions for future research

Future research on this topic should focus on:

i)   How to develop an alignment solution for project and procurement management processes, particularly on mega projects. The solution must include a procurement special dispensation.

ii)   Whether it is best to recommend that for this solution, both project managers and SCM officials must become involved in the planning process to ensure smooth execution of projects. This is needed to avoid the massive delays currently facing the organisation.

iii)   The model to propose a solution to the problem of misalignment of project and procurement processes in the railway sector including other parastatals and other regions in the country.

6.7   Conclusion

The above chapter discusses the recommendations of this researched paper. In an attempt to understand the reasons causing the misalignment in the railway organisation, the study discovered the following reasons: i) Absence of policies and processes, ii) Absence of clear consequence management, iii) Political interference in the business administration of the parastatal and iv) Lack of executive management

support. In order to address these concerns and issues, the recommendations focus on dealing with certain critical aspects that are lacking in the organisation, such as well-documented project management policies and procedures, clear documented consequence management, management support is required, and separating politics from administration. The lack of standards in the railway organisation is the main cause of misalignment because project managers are using their own discretion to apply project management processes.

For future research, the model to propose a solution to the problem of misalignment of project and procurement processes in the railway sector including other parastatals and other regions in the country.

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APPENDIX A: INTRODUCTORY LETTER

Introductory letter for the collection of research data

Pamela Malongwe is registered for the MTech (MIS) degree at CPUT (199109729). The thesis is titled **Business and information strategic alignment of project and procurement management processes in the railway sector in South Africa.** The aim of the study is to explore the misalignment between procurement and project management processes in the railway sector in South Africa. The supervisor for this research is Dr Andre de La Harpe, Senior lecturer, Graduate Centre for Management, Faculty of Business and Management Sciences, CPUT, 021 460 3627.

In order to meet the requirements of the university's Higher Degrees Committee (HDC), the student must get consent to collect data from organisations which they have identified as potential sources of data. In this case, the student will use <<insert data collection technique(s)>> to gather data.

If you agree to this, you are requested to complete the attached form (an electronic version will be made available to you if you so desire) and print it on your organisation's letterhead.

For further clarification on this matter, please contact either the supervisor(s) identified above or the Faculty Research Director, Prof Maurice Dessah, at dessahm@cput.ac.za.

Regards

08/19/2015

Senior Lecturer
Graduate Centre for Management
Faculty of Business and Management Sciences
CPUT

APPENDIX B: QUESTIONNAIRE

![Cape Peninsula University of Technology logo]

SEMI-STRUCTURED-QUESTIONNAIRES

Interview schedule

Introductory remarks: The interview is intended to assess how the railway industry in South Africa can design a collaborated model of procurement and project management processes with the assistance of IT tools to overcome the cost and time delays in the modernisation programme.

The aim: This study seeks to explore the misalignment between procurement and project management processes in the railway sector in South Africa.

We are kindly requesting answers to the questions listed below in your good faith as elaborative as you can. Your answers will be used specifically for this study purposes only and they will be treated with the highest degree of confidentiality and privacy. They will not be sold or be given to outside entities. Also, participation in this interview is voluntary and allows for anonymity as well as autonomy.

Demographic Information

Name (Optional):

Age: 0 – 35 ☐   **36 – 45** ☐   **46 – 50** ☐   **51 – 60** ☐   **Over 60** ☐

Position: **Senior Manager Projects / Finance / Supply Chain / IT** ☐

   Executive Manager Projects / Supply Chain / IT ☐

   Middle Manager Projects / Finance / Supply Chain / IT ☐

   Project Manager ☐

   Buyer ☐

Years of Service: 0 – 5 ☐   **5 – 15** ☐   **15 – 25** ☐   **25 – 45** ☐   **Over 45** ☐

Date:

Contact Number:

Number of years in service:

SECTION B: QUESTIONS

RQ1: What factors affect the alignment between procurement and project management processes in the South African railway organisation?

SRQ 1.1: What are the procurement processes being used for?

IQ 1.1.1: What is your understanding of organisational procurement policies and procedures?

IQ 1.1.2: Is there any alignment between procurement and project management processes?

If yes, which and why?

If no, why not?

Comment:

IQ 1.1.3: Are there any procurement processes specifically designed to assist project managers in meeting their project targets?

If no, why not?

Comment:

IQ 1.1.4: Do you have all the standard supply chain committees as per the Public Financial Management Act?

If yes, which ones and why?

If no, why not?

Comment:

IQ 1.1.5: Do you manage some or all of the procurement processes?

If yes, which?

If no, why not?

Comment:

IQ 1.1.6: Is there a need to improve the procurement processes?

If yes, which processes?

If no, why not?

Comment:

SRQ 1.2: What project management processes are being used by the organisation?

IQ 1.2.1: What is your understanding of organisational project management policies and procedures?

IQ 1.2.2: What project management processes are you using?

If yes, which and why?

If no, why not?

Comment:

IQ 1.2.3: Are your project management processes automated?

If yes, what and how?

If no why not?

Comment:

IQ 1.2.4: Are there any project management standards that you are following?

Comment:

SRQ 1.3: What are the challenges that the organisation experiences with the procurement and project management processes?

IQ 1.3.1: What is the impact on the organisation for not meeting project deadlines due to failure in the project and procurement processes?

Comment: Examples of success

IQ 1.3.2: Are there any consequences that the process owners face?

If yes, what and why?

If no, why not?

Comment:

IQ 1.3.3: Is there any forum where the procurement and project management processes are being discussed for matters of alignment?

If yes, how often?

If no, why not?

Comment:

RQ2: How can the parastatal organisation align the procurement and project management processes?

SRQ 2.1: How are the process tasks being performed by the organisation?

IQ 2.1.1: What is the linkage between the organisational strategy and procurement and project management processes?

Comment:

IQ 2.1.2: Is there any alignment in the planning of procurement and project management processes?

If yes, at what stage of the planning?

If no, why not?

Comment:

IQ 2.1.3: Is there any project delivery method adopted by the organisation? **Comment:** 85
SRQ 2.2: In the ERP system, is there a capability to integrate business processes? If no, why not?
IQ 2.2.1: Which mechanisms should be used to design an integrated process system? **Comment:**
IQ 2.2.2: Does your IT infrastructure currently have the capability to implement process integration? **Comment:**
IQ 2.2.3: What role will Information Technology play in the designing and implementation of a collaborated process system? **Comment:**

Any other comments:

Thank you for your time and patience in answering the questions. Your contribution is highly appreciated.

APPENDIX C: LIST OF PARTICIPANTS

PARTICIPANTS	DEPARTMENT	DESIGNATION	REGION
P1:	IT	IT Manager	WC
P2:	Project Office	Programme Manager	WC
P3:	Project Office	Programme Manager	WC
P4:	Telecoms	Telecoms Manager	WC
P5:	Perway	Technician	WC
P6:	Supply Chain	Buyer	WC
P7:	PRASA Tech	Project Manager	GAUTENG
P8:	PRASA Tech	Project Manager	GAUTENG
P9:	PRASA Tech	National Sourcing Manager	GAUTENG
P10:	PRASA Tech	Project Manager	GAUTENG
P11:	Modernisation Office	Programme Director	GAUTENG
P12:	EPMO	Programme Manager	Corporate
P13:	SCM	SCM Consultant	Corporate
P14:	IT	IT Manager	Corporate

APPENDIX D1: INTERVIEW WITH PARTICIPANT P1

INTERVIEW WITH P1 (WC IT INFRASTRUCTURE MANAGER)

Interviewer: Good day, P1, my name is Pamela Malongwe. Please allow me to conduct an interview with you. The study seeks to explore the misalignment between procurement and project processes.

Interviewer: Do you think in your organisation there is any misalignment between the two processes, that is, project management and procurement processes in the railway organisation?

P1: Yes, there is because in one procurement cycle the process alone takes about six to eight months. That means you are now left with four to six months to implement the project of any size within that financial year. If some of the processes were interlinked it would mean that we could reduce the time the procurement processes take and also be able to finish the project within budget and on time.

Interviewer: Please explore further on the factors that are affecting the alignment.

P1: I think I named everything.

Interviewer: What procurement processes are being used in your organisation? Are you aware of any procurement processes that your organisation is using?

P1: The procurement processes that are being used are basically for procuring goods from outside companies. The selection process, the bid specification process, the evaluation process, and the procurement processes.

Interviewer: Is that process done by both project managers or is it only procurement professionals?

P1: Bid specification process, which is where you specify the basic specifications, it's a committee that consist of individuals from each and every department including procurement as a chair. The evaluation process is almost the same process but what happens with the evaluation committee process you evaluate based on what you specified in the Bid Specification Committee. This is to make sure that everybody gets the equal chance of competing and being evaluated fairly. What follows after all these processes whereby now there is a full engaging of the advertising of whatever tender, the collection of documents, the evaluation of documents and all of that.

Interviewer: Can you please tell me briefly what is your understanding of your organisational procurement policies and procedures?

P1: All the organisational policies and procedures are on the PFMA, which is Public financial management act. So, Procurement is actually responsible for those policies and making sure they are lined to the PFMA.

Interviewer: Are there any procurement processes that are specifically designed by your organisation to assist the project managers?

P1: No.

Interviewer: Why not?

Interviewer: Do you have all the supply chain committees that are enshrined on the PFMA?

P1: I have mentioned them, bid specification, the evaluation committee.

Interviewer: In your organisation, do you manage some or all of the procurement processes?

P1: It is only some as I mentioned, because Supply Chain has not migrated from Procurement to Supply Chain.

Interviewer: So those some you are talking about, which ones are those that you are managing, procurement processes?

P1: Its contract management and Procurement manages the bid specification, the evaluation, and the procurement.

Interviewer: Please elaborate more when you are saying contract management, what is it that you are managing on the contract?

P1: The relationship between the end-user and the supplier.

Interviewer: In your thinking, do you think it is wise for your organisation to improve their processes? If yes, which processes must be improved? And if no, why not?

P1: I think the whole procurement process needs to be re-engineered to accommodate for the present times. Everything is still being done manually whereas the whole system can be systemised to reduce the time everything takes for approvals and all that stuff, and all the stages that it goes through. The monitoring of the procurement processes is still manual whereas everything could be systematic. So, it's the re-engineering of the whole procurement process because when you reengineer and you put technology as a key component, there is some process that is going to fall out because everything is on the system. So, you don't need bodies who actually hold these documents for some time and not do anything. Everything will be monitored on the system. End-users will know exactly know where the process is and what the delay is.

Interviewer: Thank you P1. What project management processes are being used by your organisation that you know of?

P1: Project management processes? Elaborate.

Interviewer: It depends on the organisation. Remember that we have got a PMBOK that has got a process from project planning. What I need to know is what process is your organisation using?

P1: PMBOK.

Interviewer: You using PMBOK process?

P1: Yes.

Interviewer: What is your understanding on the project management policies and procedures in your organisation?

P1: No, not that I know of.

Interviewer: Remember you mentioned that when it comes to procurement processes you need to adhere to PFMA, which is an act.

P1: It's PMBOK; if you are familiar with PMBOK then you use the policies that PMBOK supports.

Interviewer: Are your project management processes manual or automated?

P1: It's manual.

Interviewer: How?

P1: It's manual because you see if it was automated; everything will be put on the system and then it will tell you everything but at the moment the physical documents are not on the system. So there is a need for a project management portal where all the projects can be centralised under one umbrella.

Interviewer: My next question was going to be a project management standard which you already mentioned (PMBOK).

Interviewer: What is an impact in the organisation for not meeting project deadlines due to the failure of project and procurement processes?

P1: Funding becomes a problem because in most cases you can't roll over the funding to the new financial cycle. If the money is not used in that financial cycle you lose most of it. In the next financial cycle, it's impossible to roll over. Even projects that are on the system, if they are not done within that financial cycle, you can't continue with them in the next financial cycle. So funding is the biggest problem. To get funding you are lucky if you lose that if you it means that your project will never take any leap.

Interviewer: What does that do? An impact to the organisation.

P1: The impact to the organisation is that you end doing the same project for five years; you never finish it. Remember each and every financial cycle has 12 months. As I have mentioned before, the procurement process takes eight months of that twelve months; it means you are left with four months to implement any type of project, which is quite impossible in most cases.

Interviewer: Due to that, are there any consequences that the process owners face?

P1: The only people who face consequences are project managers because they are the ones who request the money. With the procurement processes, there is nothing they can do; it's an organisational issue that needs to be tackled and addressed in terms of systems.

Interviewer: If you can make an example maybe, what consequence a project manager can face?

P1: The consequence that a project manager can face is the fact that he won't get the same allocation as the previous financial year in terms of funding if he is lucky or never get any funding for the next financial cycle to even start the project after having done a lot in terms of trying to kick-start the project.

Interviewer: So if the project has already been started and the project manager does not get any funding for the next financial year, what happens to that project because it's not complete yet?

P1: Then everything stops until there is funding.

Interviewer: Is there any forum maybe where procurement processes and project management processes are being discussed jointly?

P1: If you still remember I spoke about re-engineering; the IT re-engineering forum is supposed to be the one looking in those processes and trying to join them but at the moment there is no process re-engineering that is happening anywhere, we are just putting in technology without looking at the process level.

Interviewer: The forum I am talking about, earlier on when we started the interview you agreed that there is a misalignment in your organisation so, my question is seeing that you acknowledge that there is a misalignment. Is there anywhere where the project managers and procurement officials meet in one room where they discuss the misalignment on the two processes?

P1: No because there is no process re-engineering function within IT to actually look into that, that's where the problem is.

Interviewer: So you mean you do not meet at all?

P1: No.

Interviewer: Why are you not meeting?

P1: It is not a matter of highlighting the problem, it is about fixing the problem, and IT is supposed to be in the forefront in terms of process Re-engineering because with better processes you are able to the necessary efficiency that you need.

Interviewer: If you were a captain of this ship meaning the head of your organisation, how could you make sure that the two processes are aligned?

P1: There is an enterprise architectural leg. I will introduce a process re-engineering function, which will look into all organisational processes and see how we can efficiently reduce and improve.

Interviewer: In your own understanding, what is the linkage between your organisational strategy as well as these two processes, which is organisational strategy linking with procurement and project management process?

P1: There is no linkage at all because if there was a linkage, procurement will know that this project will be useful and it has to be delivered in such they know the timeframes and they will able to meet the necessary timeframes for the project to be.

Interviewer: Do you have any ERP systems in your organisation?

P1: SAP.

Interviewer: Do you think that SAP has got a capability to integrate these two processes?

P1: SAP has got the capability to integrate but the problem as I have said before, technology alone cannot solve the problem until such time there is a process re-engineering function that happens first. To say these processes need to be taken off or we need to join process number one and process number two in order to improve the efficiency, but in the absence of someone paying attention to process re-engineering then people tend to look at technology in deploying technology in putting the same type of system not improving the systems.

Interviewer: Which mechanisms should be used to design an integrated process system?

P1: Software re-engineering process.

Interviewer: Does your infrastructure currently have the capability to implement such a …..?

P1: The IT enterprise architecture has got a functionality to actually implement that function.

Interviewer: Which role will IT play in the design and implementation of the collaborated process system?

P1: Process re-engineering, training and technology.

Interviewer: Thank you very much.

APPENDIX D2: INTERVIEW WITH PARTICIPANT P2

INTERVIEW WITH P2 (WC PROGRAMME MANAGER)

Interviewer: P2, this is an interview for my studies. You know that I am doing a study of an alignment in the two processes, which are the procurement processes and project management process. The aim of my study is to come up with a model where I combine the two processes because I can feel that there is a disjoint of the two. From you I will be requesting some answers and all the information that we will be discussing here will be confidential and its voluntarily to do the interview.

P2: Its fine, I'm quite happy with that.

Interviewer: All the people that I will be interviewing is basically IT people, project managers as well as all levels senior middle management as well as supply chain staff.

P2: Can I make a suggestion? I don't see you've included everybody like [Chief Signalling Manager]. Have you contacted them? Because I would suggest that you speak to [Chief Signalling Manager].

Interviewer: From infrastructure? No because I categorised him under project managers. These questions are grouped into three. I will be asking firstly questions that are related to Supply Chain, questions that are related to project management, and lastly combination of the two. Let us now begin with the supply chain questions.

Interviewer: P2, like I say, that the aim is to come up with a model where I will be combining the two processes, personally do you feel that there is a disjoint between the two processes?

P2: Yha, look the simple answer is there is no proper alignment. In other words if you say disjoint it might sound like there is a total break but misalignment is in my view that the two are not running in synergy with each other. The procurement processes and project management process seem to be running their own course and they should be an integrated process.

Interviewer: According to your view, what do you think are the factors that are affecting alignment between those two processes in the railway organisation?

P2: The first thing is that there is no integrated planning of these processes. In other words, the project plan if you want to put it that way and the procurement plan are not done together. You get a situation I believe where a project manager assumes that this is the procurement process, or how long it will take, and not always confirms with supply chain; whereas, if you have an integrated plan where the supply chain and a project manager sit together and they agree on the procurement plan, they agree on the procurement process because you have to have a very good understanding between the two processes so that you get an integrated plan. I think that is the first thing, you need an integrated plan. The second one, if you are talking about the factors affecting the alignment, is that it could be a matter of knowledge of project management by both parties. Supply Chain should have a very very good knowledge of the project management process as well as the obligations of the project manager. I think there is level of knowledge deficiency from both sides; project managers need to know how the supply chain process work and supply chain people know how they fit into the project management process. I think those are the two big factors. Integrated planning and then maybe the knowledge gap between the parties in terms of the process.

Interviewer: P2, you can tell by now, as you are saying that these two processes that one needs to have knowledge of another. Are there any processes in the organisation that are designed specifically to assist project managers to meet their targets? Are there any procurement processes specifically designed for project managers to assist them to be able to meet their targets on their projects?

P2: I know Supply Chain has got two documents that they use. They have got a supply chain policy and then they have got supply chain procedures, which describe the procedure. I think from a documentation point of view there should be enough knowledge or enough information. I'm just not convinced that there is enough knowledge in the individuals to apply those processes.

Interviewer: Those documents, P2, I think at some point affiliate to PFMA, in those documents do we then have all the supply chain committees that are enshrined in that PFMA?

P2: They should be there. I must say I haven't gone them through in detail but it should describe all those policies that are captured in the legislation as well as the internal PRASA policy.

Interviewer: You as a person, do you manage some or all of those procurement processes here in your organisation? Do you have anything that has to do with procurement processes personally?

P2: No, the policy is very clear – project managers do not get involved in the supply chain processes, sort of like separation of duties because it could happen that, let's call it a project manager, influences the process. From my understanding, there is a very clear separation instruction that project managers and Supply Chain [have], although they need to have an integrated programme they mustn't be involved in each other's processes from [a] corporate governance point on view.

Interviewer: Seeing that you have been involved in so many projects in this organisation, do you think, as a person or as an individual, do you think there is a need for the organisation to improve the current procurement processes?

P2: Yes, definitely, and the reason for that is that the environment around us changes, sometimes it changes quicker than we can react, from a policy point of view. Our supply chain procedures must be aligned with what is happening in the environment. And sometimes the supply chain policies for example take too long to accommodate the changing environment so they need to be aligned. I think there is that aspect to it, and then there is an aspect of improving the knowledge base between the supply chain and project managers so that they can come up with the proper integrated plan that they both understand and that they can apply so that, for example, supply chain understands what effect their process has on the production of the project. On that basis we should be improving what we call the… of the alignment of the two processes, alignment and knowledge.

Interviewer: What are the project management processes that you are using in the organisation?

P2: If you say what is a project management process, look, I think the short answer is yes; however, I do not think there is a common understanding with all project managers what the process is. I think the reason for that is because we have not adopted a proper standard for project management. If I say that people talk about PMBOK, but if you go and look at the way that they apply the practises, it does not fully conform to PMBOK. So, if I say there is a process, yes, and it's based on general knowledge of project management, but if you look at customising that from PRASA'S point of view, I don't believe there is a generic customised understanding of project management

Interviewer: Is there any standard that the organisation is following? Is PMBOK one of the standards that you were supposed to be following as an organisation?

P2: As I say, I do not think it's an accepted standard although the project managers, when they come out of their studies, everybody will talk about PMBOK and they try to apply it. I think one must remember that any standard needs to be customised towards to the individual organisation's culture. I think there is a standard but it hasn't been customised for the use within PRASA. To deal with things like using EPIC, and the way that we deal with Supply Chain, and the way we deal with business cases and things like that. It is captured all over but it is not integrated or consolidated.

Interviewer: The process that is there, is it automated or is it manual?

P2: Largely manual.

Interviewer: What challenges is the organisation facing with these two processes?

P2: Let us recap, if we say the challenges facing that is [an] integrated plan, generic knowledge of the integrated plan, in other words, knowledge between supply chain project managers of that plan, a common understanding of the standard processes involved in project management and supply chain. Those are the three big things: the integrated plan, it's the knowledge of the plan, and the integrated

understanding of the standard of supply chain and project management. To me those are the three big things that are hampering effective implementation of the project.

Interviewer: What is the impact on the organisation for not meeting project deadlines because of the misalignment of the two processes?

P2: I guess there are two levels of impact; one is pure financial impact because if projects are delayed you've got financial implications because prices increase. You could get situations where contractually you need to start paying penalties and stuff like that. There is definitely a financial impact I would guess it is probably between 15 to 20 percent of the budget at value. The second portion is on the operational side where any delay on the implementation of the project has got an impact on making operations more efficient because remember projects are designed to make the operations efficient. So any delays you have there have a knock on effect that your operations do not become efficient as you are implementing. So I think those are the two main things, but the third one is what I would call the reputational impact because if projects are delayed, our stakeholders out there, we don't meet expectations and they don't like to see an organisation that is not efficient. Any delays have got that negative reputation impact. It's those three financial, financial and reputation.

Interviewer: Is there maybe any forum, be it at regional level or at head office level where project managers and process people are meeting where they are discussing matters of alignment, because I don't think it's me or only you who can see that there is a misalignment? Is there any forum where SCM people and project managers meeting at some point just purely to discuss?

P2: I am aware of the forum that EPMO tries to have every six months or so; they call it the project management forum that is managed through [Programme Manager's] office where project managers from the regions, Supply Chain, Finance, the EPMO get together and they discuss matters of mutual interest. So there is an attempt to do that; however, the frequency of that forum is not frequent enough and the content of the forum does not talk very much to standards. It talks to maybe more internal process, so, I would think that that forum, which is a good forum, I think that initiative is excellent however the content of the forum should be changed a little bit more and the frequency must be increased. I would think every quota they should have a forum like that.

Interviewer: So your complaint is on the frequency, six months is too much?

P2: Even six months, sometimes, look last year they only had one. Even the six months they cancel it then it does not add any value.

Interviewer: On some of the decisions or resolutions that are made on that forum so its [name deleted] office, which is the EPMO that are making follow-ups on those.

P2: Yha, yha.

Interviewer: So you don't know at what point do people, are they actioning what they are supposed to be actioning according to what transpired in the meeting?

P2: I cannot recall the exact outcomes but I think some of the issues are actioned, especially when there are very critical issues that need to be resolved. However, I think lot of those actions aren't dealt with. You know I believe that forum should for example not be a one day. It should be at least two days. The first day to deal with let's say process problems. If for instance there is an issue with delays in BSC (Bid Specification Committee), that sort of thing should be dealt with on the first day. The second day should be dealt with as a training session. The EPMO for example devises that project management, supply chain management process with using the PMBOK principles. But then they train the guys to do that, in other words, they train them on EPIC, they train them to apply the processes, they train them in their procedures, because to give somebody a book and say this is a procedure, it's not always as good as having training sessions where you can interrogate the material and at least you can get a common understanding. So to my mind, that session should be, let us call it a general issues or a discussion, but the second day there has to be training. Then you could be in a situation where you insist that all project managers apply the same principle and the same standard. So I say there is a forum but it's not sufficient and I would suggest that you expand the forum to deal with those two aspects.

Interviewer: P2, according to your own understanding or perspective, how can a parastatal align the two processes?

P2: Well, I think first of all, there has to be very clear policies and procedures for both processes; that means supply chain policy and procedure and project management policy and procedure. Remember the policies and procedures on the project management side capture the whole of PMBOK standards because that's the procedure on how you do that. Then you take those policies and those procedures, then you look at them, and you look at them in an integrated way, and see if you need to twig them just to make so that they run efficiently, especially in terms of time lines where you have a flow diagram of your processes. You just make sure that the project management process and the supply chain process at least they align, that you can determine timelines and make sure that they work together. To my mind one needs to do that and it's probably not very difficult, you just need to get some individuals that understand the processes and to come up with the integrated policy and procedures document to say this is how you do it. And then you take that and then you go and train people. What we can do, for example, we've got the chair for research at University of Stellenbosch, so we can tell them look, here is the supply chain stuff, here is the project management stuff that we use, develop course material that captures all these stuff and then we send all our people to them and they train us. Then when they come back they sing one song because what happens now as you send people to University of Western Cape and then you send some people to Wits and then you send other to another university or of another Technikon and they don't talk the same language. The principles might be the same but you don't have that common PRASA thread coming through.

Interviewer: I should think the problem in our organisation is that we do not have a dedicated project management office where you have project managers that are directly dealing with all the projects, be it an intra-projects customer service project in this office, so we don't have such a…

P2: I would think for example from the theoretical and practical point of view, organisations like EPMO should take charge or maybe PRASA Tech because they are doing the most projects, but I think the EPMO should take control over that process. So, they shouldn't be there just for approving projects, they must be there for ensuring that the implementation mechanisms are standardised and that people are dealing with that understanding.

Interviewer: With these two processes, are there any linkages from the process point of view to the bigger strategy?

P2: Look, I think in principle yes that is the role of the EPMO because they are supposed to approve projects that support the PRASA strategy. But I don't think they are taking strong enough control over the execution. They approve the projects and say right go and do it, they don't necessarily make sure it's done. I think there is it in principle but in practise, I do not think it's not executed well that integration or that alignment with the strategic plan.

Interviewer: Are there any project management methods that we have adopted in the organisation?

P2: We have, in certain cases for example, the signalling project is a design and build. We've developed a user requirement and based on that, the contractor goes and designs and builds, so it's a design and build. Then we've got other contracts where we do the design and the contractors just implement, for example the fencing project – we do the design, the contractor just goes and implements, so [it] depends on the nature and the complexity of the project we depend on what process you use for that.

Interviewer: In other words, there are methods but it depends on the nature of the project?

P2: Yes and the nature is predominantly determined by the complexity. Simple projects where we can do the specs its easy, but if you have a complex project like the signalling project and even a rolling stock it's very difficult to specify the technology 100% so you rely on the contractor to do that based on some of the user requirements

Interviewer: In most cases do you use consultants on where you do specifications?

P2: Sometimes yes.

Interviewer: Is there any ERP system that you have like SAP or Oracle?

P2: Yha, we've got SAP but we haven't implemented the Project Management module itself.

Interviewer: Do you think there is a capability to integrate those two processes on SAP?

P2: Most definitely. SAP should be configured to, ok let's say the engineering field to deal with finance, to deal with maintenance, to deal with your warehouse, to deal with your projects. Those four things need to be integrated into SAP and the reason for that is to deal with the finance firstly. Secondly to deal with your process because remember lot of the projects management work is done by your maintenance people and then you need to be able to manage your cost structure. So you can allocate certain costs to project or to maintenance and then the warehousing is important because often what happens is we purchase the material for projects and then free issue them to the contractor, but that has to be managed through a system like SAP material.

Interviewer: We are a project management organisation but we do not have a project management component on our SAP. But why do we not have those, because we do have SAP? Why are they not activated, those two?

P2: Money is the one I think, and the second one is, I suppose you could say foresight by management because when we went to the procurement of SAP, it should have been part of the overall implementation plan upfront. I don't think there was really the foresight that it was 100 percent necessary to do that. Well, maybe there was a foresight but it just was not implemented as part of the initial contract.

Interviewer: Which mechanism should be used to design the integrated process system?

P2: I guess you could say it could be part of developing your integrated management system dealing with ISO and PMBOK as a standard, then you integrate those processes; you could do it that way. However, I believe you should probably get some specialist knowledge to do that, people that have already had good understanding of that to help you to develop those procedures is synergy. So you probably need a bit of an external resource to help you to do that, for example specialist project management consultant or even academics for that matter. That's why I'm suggesting that we use for instance Stellenbosch University to help us to do that integrated development.

Interviewer: Do you think our infrastructure or even SAP have the capability to integrate the two processes?

P2: SAP I think would have the capability if implemented the right modules.

Interviewer: Which role will IT play in the designing of the integrated process?

P2: I guess they should be responsible for SAP software side, in other words, the SAP integration, that's their role as IT. It's quite a good idea to have an expert project management office under the EPMO to ensure that standards are implemented.

Interviewer: P2, we have come to the end of our interview.

APPENDIX D3: INTERVIEW WITH PARTICIPANT P3

INTERVIEW WITH P3 (WC PROGRAMME MANAGER)

Interviewer: Good morning, P3, my name is Pamela and I am conducting an interview. Please allow me to conduct an interview with you. My study seeks to explore the misalignment between procurement processes as well as project management processes. Will you please introduce yourself?

P3: My name is P3. I am the head of department of SPPM PRASA Cres, Western Cape Region. I am a trained QS with a Project Management Professional Registration. I am also, I have also, been exposed to property studies at a Master's level.

Interviewer: Thank you, P3. According to your own understanding as a head of the department, do you think that your organisation has two processes, project management and procurement processes? Do you as a person think that is there any misalignment?

P3: In terms of the misalignment, I think that perhaps maybe the supply chain personnel need to be more exposed in terms of construction procurement processes and how they function. And also if you look at the so-called contract management function which lies with supply chain, it's not done to the T, so it ends up by default landing with the project managers within the SPPM of which it's not their function in terms of the definition of the services offered by the supply chain unit. So, in that way maybe there's that one area of misalignment or mis-expectations in terms of who has to do what and what is expected of them.

Interviewer: In your organisation, is there any procurement process that is specifically designed or customised for project managers specifically?

P3: No, they follow the same process as per the procurement policies of the organisation. There is no specifically designed process as far as I can remember, because if you require a service of a QS, for example, depending on the nature of the work its either you submit three quotations – they follow a three quotation route. I think it's only one process followed, there is no specific one for project one and specific one for general things.

Interviewer: Do you not feel that there should be one process designed specifically for project managers?

P3: For me, I think there can be but I think it is more of training the personnel or getting the appropriate resources for Supply Chain Management. If you capacitate it with people that have as I mentioned, say for instance a QS Engineering background, then they will be able to understand the kind of construction procurement.

Interviewer: Do you have all the standard supply chain policies that are in the PFMA in your organisation? Does your organisation have the same committees that are there in the PFMA?

P3: I would want to believe that we do have the same committees because we have introduced the whole host of committees recently, the Bid Specification Committee being one of the committees, the tender evaluation, I would assume that we comply in that respect.

Interviewer: Do you manage any of the procurement processes in your space?

P3: Well it's just a matter of I don't manage directly but I manage indirectly in a sense that there is a schedule that we prepare and hand over to Supply Chain today. Once we have reached a process where we get we prepare a specification and everything, then Supply Chain takes over from there until they give us whatever service that we need. So, what happens during that process is the responsibility of the SCM Manager but we don't have a direct management of the whole process. The responsibility does not lie with us; we cannot influence the process. Anyhow, it's mainly the supply chain manager's responsibility. So it's an indirect management from project management's side.

Interviewer: Is there any need to improve your current procurement processes?

P3: Well, as I said, it's a matter of getting the right people that understand the business requirements and also getting the right resources that can be able to function within the procurement relating to construction projects.

Interviewer: What are the project management processes that you guys are using in your organisation?

P3: We use various, the basic toolkit that we use, the PMBOK, which is published by [the] Project Management Institute (Project Management Book of Knowledge)

Interviewer: So you are following PMBOK?

P3: For now, we are following PMBOK, and also we are following SACPMP processes.

Interviewer: What is your understanding on your organisational project management policies? Do you have any policies that are guiding project management processes?

P3: No, we just use best practise processes, which are not tailor made for our organisation. We are still lacking in that respect; we don't have policies that govern our project management processes and procedures. We use best practice procedures like SACPMP and PMBOK.

Interviewer: Your project management process, is it manual or automated?

P3: The process is both manual and automated. Manual in a sense that you have to interact with people in terms of meetings and all those other processes, but also automated stuff where we input a program into MS Project.

Interviewer: Thank you, P3. What is the impact on the organisation for not meeting project deadlines due to the failure of either one of the two processes? What is an impact in the organisation?

P3: It's huge. The decisions that are taken or the way things are run, they have a huge impact because sometimes you find that failure results due to the incapacity of the individual or capacity of the resources in terms of the numbers of people that need to help and the result in failure has a huge impact on the organisation. Lack of capacity, lack of focus, lack of individual capacity, the lack of a sense of urgency on these things, and a lack of understanding the impact of a delay of awarding a tender from a costing perspective. You will find that a lot of people in the supply chain space don't really understand the impact of these financial decisions and that what they are dealing is financial decisions. We can have a negative impact on the outcome of the product itself that we expect to achieve at the end of the day. Why our projects are so expensive, then you begin to think if you look at the time they submit the prices to the time the tender is concluded, it takes so long. So much that their profit is eroded throughout the whole process because now the other things that, remember, most of the people that tender in our projects they are repeat tenderers so they know our processes, they know how we work.

Interviewer: Which processes are involved there?

P3: It is Supply Chain; from the time Supply Chain requests for the prices to the end of the award of the tender.

Interviewer: What are the consequences that the process owner faces? You have mentioned that it is a process of Supply Chain, so the owner of that process, is he facing any consequences? And from [a] project management side, is the manager facing any consequences?

P3: The problem is that the project manager is blamed for everything – that is the problem in this organisation. The project manager gets blamed for everything even though there is a process owner for the procurement processes. But now because as I said, there are limitations in terms of capacity, understating what the impact of this process is on the project itself. The lack of that understanding helps the people that are managing this process to get away with murder because then nobody understands the impact of the delays.

Interviewer: Is there any forum where supply chain officials, project management officials meet in one room and discuss, each discussing their processes?

P3: What I have done is I have implemented on my side weekly meetings. By that, I'm trying to get to a point where we are trying to understand the bottlenecks from their side and what it is that we can do so that we can advise on the impact of their delays, but I don't know if it's an organisational thing. I'm doing it on my side just to alleviate the problem.

Interviewer: Is it working?

P3: It does not seem to be working because there are projects that are in Procurement for more than 10 months or close to 10 months now; it's not really working.

Interviewer: According to your own view, how can this parastatal organisation align the two processes to avoid projects that are delaying like the ones you have just mentioned?

P3: What can work is perhaps having two separate procurement processes, those that are specifically for projects and those that are specifically for purchases of things and small items and all that, so that such, that at least on those one that you are saying its procurement for construction purposes. Then you have contract managers in charge of those processes, because at the moment we don't have people that are clued up about construction contracts; yet, they say they manage those contracts. That's a huge risk from an organisational point of view because should anything go wrong with regards to those processes or those contracts, then who is going to take the responsibility? It's not going to be the project manager because we don't manage contracts. Supply Chain claims to manage contracts, so it is a risk to the organisation because the organisation is not well resourced in that space to have contracts space, to have contract specialists.

Interviewer: With your project management and procurement processes, is there a linkage to the strategy of the organisation?

P3: There is a link between project management and the strategy because one of the main strategic focuses is to modernise the assets, so by doing that, we implement the projects in the railway environment to improve the asset and to modernise them. So I would say there is a strong linkage there because then as a department and the processes that we use to be able to achieve that. The key thing that is lacking in this organisation is the business processes. Because we don't have those processes everybody tries to have their best practise methodology in doing things which is not necessarily what everybody understands.

Interviewer: I believe that project management and procurement processes have a planning phase. The question is, is there any alignment? Or is there anywhere where project managers and procurement professionals do planning jointly? Like when project managers are planning, do they plan with supply chain professionals?

P3: No, what we do is we don't plan with Supply Chain, but what we do, we communicate the list of projects and how those projects will be executed and we do a demand management which is a document that shows what projects we have and how those projects we intend rolling them out in terms of the procurement window, which is not our responsibility. We then inform Supply Chain that here is an overall programme on this project however you are required to support us from point A to C of this programme because that is your area of responsibility. That's where we sit together and say this is how we need your input as SCM.

Interviewer: What are the project delivery methods you are using like those build transfer?

P3: We use the standard one, which is the principal building agreement, which is based on the design bid and build. You get the professionals to design, and then you take that design out to tender, and then you get the contractor to build. The other method we use is the ten key project methodology, which is design and build. You appoint a contractor, a consortium that will design and build. In that consortium you've got consultants, or rather the professionals, that will design the structure; as the structure gets produced then the contractor begins with the construction immediately. That's a design and build. For that type you use either NEC or GCC and conditions of contract or you use the principal building agreement for the mainstream agreement or construction purposes.

Interviewer: Do you have any ERP systems that you are using in your organisation like Oracle, SAP?

P3: We've got EPIC. According to the project managers, it needs a lot of inputs, like you update it as you go along. You input the input information at the beginning and then monitor. You have to update it all the time every month. But then that one, it's not really; I would say it falls under the ERP. It does not serve the managers; it serves the executives. From an executive perspective yes, because then you update the information every month, then the executives pick it up on the other side. So far the system has been used effectively. I think they are probably looking for an alternative system but I'm not 100 percent sure.

Interviewer: What role can IT play in terms of assisting project managers and procurement professionals, in your own understanding?

P3: The way IT can help is assist is in procuring systems that would help us to manage contracts properly. Yes, there are various systems; there is PMBOK, which is related to MS programme, then there is primavera programme, which can be used as well. So there is quite a number of programmes which one can pick from, but then also those packages will have to be aligned with our business processes and then be procured via IT. Also, IT can help us in procuring the pricing packages for construction work because there is a, what you called Merkel. Merkel is a pricing package for builders and bill cost. Merkel contains a database of all the construction material and staff, which, if its installed then you can obviously check if you receive contractors, check if they have properly or not. Those are the things we can bring on board to help us, and also we can prepare bills of quantities in house using such packages.

Interviewer: Who compiles bills of quantities?

P3: Professionals, external quantity surveyors.

Interviewer: Is there any other comment, just out of the question, to maybe elaborate on except the ones I have just asked? Something that maybe I didn't ask and maybe you want to share with regards to what we spoke about?

P3: I think I have covered a lot of things that will also trigger certain things in your mind and in your study.

Interviewer: Thank you very much for your time.

APPENDIX D4: INTERVIEW WITH PARTICIPANT P4

INTERVIEW WITH P4 (TELECOMS MANAGER)

Interviewer: This interview is for academic purposes because I am doing studies on alignment between project management processes and procurement processes, because what I discovered is that there is no alignment between the two processes. Even though you find out that these people are supposed to be working hand-in-hand, but our projects especially the modernisation projects, even the CIP project, they are failing. It was my view that there is no alignment so my question is, do you feel there is no alignment between the two?

P4: That's true due to lack of communication and commitment.

Interviewer: Commitment from which side?

P4: From SCM, because projects are failing due to commitment from SCM's side. Sometimes you have to follow up. They are not coming forth with information. You would sign this form only to find out they are not using this form, they are using another form, so if they are committed to a process they should update this communicate that when you do things. Even if you looking at approval you use a wrong form that was the one that was used. You are not even notified if there are new members even the new management. You hear through grapevine that someone else took over. There is not even a communiqué.

Interviewer: From the region or head office?

P4: Both.

Interviewer: Do you know of any procurement management processes that are being used in the region?

P4: yes, I had to dig them. I know about them because I had to dig them out of them. We ran into error first before I knew about it it's not like it was volunteered information to me.

Interviewer: From your knowledge is there any procurement process that is specifically designed to assist project managers except the general process that you say you know about. Is there any particular or specific process except the standard process?

P4: It is there, it is existing, because as project managers we had to assist the SCM to develop one.

Interviewer: Where can I find one?

P4: It is the BSC procurement process. Actually, it's an agreement; I don't know if it's a process. I will find it out for you on how to evaluate things on BSC.

Interviewer: PRASA, as a company, does it have committees as per PFMA?

P4: I do not know all of them, those that are known are in place.

Interviewer: Which ones that you know of?

P4: BSC, BEC, RTPC.

Interviewer: These committees that are in the PFMA, does PRASA name them the way they are in the PFMA?

P4: I do not know.

Interviewer: Do you manage any of the procurement processes?

P4: Yes, BSC.

Interviewer: Is there a need to improve the process that you are managing?

P4: We already improved it. When we got there no nothing, there was no communication on how to run the BSC, so we had to setup standards come up with dates that we are meeting come up with time assist the members. We approached CIDB for a process. We go CIDB here in Cape Town to run workshops with us because we didn't know anything. That is a procurement process, not mine.

Interviewer: So when was that?

P4: It was done late last year (2015). CIDB came and they gave us on how to run projects and how to rank them.

Interviewer: Meaning there was a challenge on the process?

P4: It was not communicated. It seemed that SCM knew about these processes but it was not communicated to us and some of them they didn't even know because they all attended the CIDB that was meant for people not in SCM. All of them, they were there, which is the workshop that was not even organised by them. We, here in engineering approached CIDB to come and run workshop for us.

Interviewer: Workshop of the procurement processes?

P4: Yes, CIDB process. It is done. It is like improved, at least everybody is in par now, including them, including SCM. They know what we are expected to do and we know what we are expected of us and BEC. It is like a chain; [the] project manager brings a project for evaluation to the BSC then SCM needs to guide them and tell them that if you want to buy a computer do not specify. We go on advertisement and then from advertisement then it's BEC for evaluation they evaluate monies and specification and then after that it goes to RTPC for approval. So we are sitting on the first step of procurement chain.

Interviewer: If you are sitting at BSC, therefore it means this is the beginning of the process, and therefore your one has been sorted out, so how about the other processes?

P4: I do not know. I know for a fact that there are big issues, big issues – appointment, this one they appoint people for each and every project. It takes a while on the BEC. This goes to Joburg for approval; it takes months and projects are piling, piling, and piling. You are lucky to have approval from Head Office. These members (BEC) are approved at Head Office and this one was approved donkey years back. These two are not even aligned these two systems in the same chain because of time.

Interviewer: For the betterment of time, please name them and say BSC or BEC. You saying there is a problem in the BEC?

P4: There is a problem in the BEC – appointment needs to happen at Head Office. When there is a project, let's say project of purchasing trunk radios, then we sit and we see at BSC that the specifications are fine no one is left behind. Then that is done it goes for advertisement. After advertisement, they need to appoint now the BEC members (Bid Evaluation Committee). But, the appointment of these members is for each and every project and the rate of which this BSC is feeding BEC, BSC is sitting every Monday. BEC is sitting as in when they are members approved by Head Office. As for my experience, this BEC member of committee appointment takes 3 to 6 months.

Interviewer: How long have you been involved in this process because someone that I spoke to told me that these powers were invested in the region?

P4: Yes but it was taken over.

Interviewer: How was it at that time compared to now?

P4: It was easy when the regional manager was here, at least you can walk to his office. Now you depend on a call and an email and sometimes your email is not replied on; sometimes your calls are not replied on. This thing of escalating things to Johannesburg, I think it's a central repository that where the delay is. In the past we used to appoint this thing regionally and it was same committee members for all projects. Now its head office based and every project has got its own BEC members.

Interviewer: But the BSC is standing? Same people?

P4: Yes, same people.

Interviewer: So after BEC you have your RTPC?

P4: Yes, the (BEC) recommend to the RTPC that this is the person that is meeting all the requirements. We are recommending this person based on price, based on skills, based on whatever.

Interviewer: When it comes to project management, do you know of any project management processes that the company is using?

P4: No, they are there but I do not know an official one.

Interviewer: Do you know if the procurement processes are automated or manual?

P4: Manual, it's not in the system or what do you mean?

Interviewer: With whatever that you have explained in your process, what are the problems or challenges that the organisation is facing due to the problems in a process? Just explain.

P4: Delays. Projects are being run over to another financial year and whatever you developed projects for.

Interviewer: What is the impact on the organisation itself for not meeting deadlines due to a failure on projects?

P4: Things are going to die like I am saying to you, if we didn't meet deadline phone are going switch off there will be no protection because we are using this as a communication and protection. Telecommunication is growing fast.

Interviewer: Back to the processes again, is there any forum where SCM people are meeting and discuss? Personnel will discuss the SCM processes.

P4: Yes there are unless we (the ones who are bitten by shoes) we go and pull them and it is that once off thing just because there is a problem. If there is no problem at hand at that time, it is not an on-going thing; it must be triggers by something then it will be there.

Interviewer: So there is no standard?

P4: No, there is no on-going thing.

Interviewer: Seeing that you guys, especially you, you are the owner of one of the processes, why don't you initiate something that can be a standard to say project managers and SCM we need to meet and do these forums for instance?

P4: Sometimes there is no commitment. Remember I said to you they will not come they will delay and eventually you get tired. They will apologise and they will send wrong people to the meeting and the responsible person will not come. You can see there is no commitment in this and it depends who you are also the one calling a meeting. A person will only come once and decide not to come again.

Interviewer: Ultimately how can this be done where the two departments can meet?

P4: I don't know because even the heads also responding on fires to take fire extinguisher. SCM should be worried that we don't know anything because it is not our interest, yes it does affect us big time it's not our field so we are expecting that if you are at SCM do your part because I am also busy with my engineering. Since it stops the projects and becomes a big showstopper, then we get involved in SCM processes. In an actual fact, we are not supposed to because now when we get to SCM processes we will bring our own people I am going to know my brother who is supplying all these. That's why there is a big line that project managers and SCM. These people are conscious about certain rules and we don't know those fine rules and we don't know the stringent processes that this needs to go out on tender for so many days and whatever and whatever.

Interviewer: The organisation has got a business organisational strategy. The question is what is the linkage between your process to the PRASA strategy or to the regional strategy? Is there any linkage that you know of?

P4: No.

Interviewer: The next questions are purely IT related questions. Maybe you might know the project delivery methods, these are your build-design operate. These are all the project delivery methods, are you familiar with any of those?

P4: I am familiar.

APPENDIX D5: INTERVIEW WITH PARTICIPANT P5

INTERVIEW WITH P5 (WC TECHNICIAN)

Interviewer: Morning P5, how are you? I will be doing an interview. The interview is an academic interview; it is for my studies. I'm doing a misalignment between project management and procurement processes. Your answers will be used specifically for this study purposes and only will be treated with the highest degree of confidentiality and privacy. Please tell me what is it that you are doing in your organisation.

P5: In PRASA we transport commuters from one place to another. In my department we do maintenance of tracks. We just ensure safety of tracks.

Interviewer: Please tell me about procurement processes. What is it that you know about procurement processes?

P5: Its where they bring the suppliers in for us project managers to create the specification and so on and the Procurement carry on that process procuring those service ensuring that we get the right personnel or contractors to carry out the project.

Interviewer: Do you understand the steps of the process from the beginning? Please tell me about them.

P5: Yes, it starts from the bid specification whereby there is a committee that sit in to discuss about the specification, is the specification clear and reasonable? It goes to the tender process. From the tender process the tender is advertised, evaluated and awarded then it ends at the award of tender. There is also payment that we also with procurement offices at SCM in terms of monitoring the project and then they submit certificate to them up until the project ends. I do not know if my steps are clear, I did not go step-by-step.

Interviewer: Do they understand your schedule as project managers that you need to achieve this project at this particular time so that they can be able to align all these processes and make sure that at that particular time the project is done?

P5: I will say there is a boundary in between; I wouldn't say they understand. Reason being, for us we set the contract by looking at the scope of the work and we set the contract to say this job will take so long then we determine the duration of the contract. But according to them they see this time as too short. I don't want to get into a process where you put a motivation to extend the contract to say instead of that six months let me add another six months and make it a twelve-month contract. These are the things we don't discuss with them to say why do we say six months instead of twelve-months what are the concerns there.

Interviewer: When you plan your project, do you involve them or do you just plan your projects?

P5: Remember, as a project manager I sit there on my own. I am also a technician on the other side. I design the specification on my own then take the specification to the bid committee. They are not technical employees they are admin but there they get the understanding of what this job is about. I have not sit in bid specification but I think this is what they are discussing about.

Interviewer: Who explains the specification to the Bid Specification Committee if you are not sitting as a project manager because there are things they will need clarity on? How do they get clarity because I understand maybe you have got some technical wording that they must need to understand and if you are not there how do they find clarity?

P5: All the departments are represented on the bid specification. There is one from electrical, Perway and telecoms. I'm a project manager. I should not get involved with the procurement processes because I will do them to favour the contractor that I wish it can be appointed. I only build the specification and take it to them. The bid committee discuss about my specification. They are also aware of the technical

terms if there is something they are not aware of they will communicate with me to find the clearance from me.

Interviewer: As a project manager dealing with [the] Procurement department, are there any procurement processes specifically designed for you as project managers to make sure that you guys execute your projects quickly?

P5: What I know about the project management steps, which is initiation, planning, monitoring and the closure. When I first arrived here there was no documented guidelines that are set where you have to follow these guidelines. Your project starts here then you have to communicate with procurement when you are here at this stage. I have never seen a flow chat like that unless we missed it.

Interviewer: How long have you been in your role?

P5: I started here 2013.

Interviewer: So you have been managing projects from 2013?

P5: Yes.

Interviewer: If you are saying you have not seen any project management process, do you know of any project management methodology that your company is following like your PMBOK or Prince 2 maybe?

P5: No. I use my own knowledge.

Interviewer: And other project managers are using their own?

P5: It's your own discretion.

Interviewer: Do you have alignment with project managers on the executive level and the local project managers that you can be able tap into those contracts? Like the information flow, the understanding. If they already appointed a contractor, they send you information that these are the contractors for this particular job?

P5: Yes. It was a long list of contractors for Perway and electrical that these are the contractors from Perway that we can use and these are the contractors that can be used by Electrical. If we've got a quotation to repair a turnout or we need to repair those turnouts, then we just create the BOQ send the BOQ to our engineering manager and then the engineering manager will send the BOQ to the relevant contractors then they submit the quotation.

Interviewer: Is that the shortest process from the previous process that you guys had to go on tender?

P5: I do not know what was the reason of bringing in this method. I can't remember the name of this process.

Interviewer: So there is no tender process on that one?

P5: No there is no tender process that we have to follow. I don't know if the tender process was already followed up by the head office but these are the approved contracts.

Interviewer: So you said you are not aware of any project management process you are just using your discretion?

P5: The name of the method is *ad hoc*.

Interviewer: The project management process that you are using, is it automated or manual? Your discretional project management process, is it automated or are you doing it manual or is there a system where you doing your process?

P5: We do not use it. We've got EPIC that was introduced. I tried to use it personally. I registered my projects. I sent some emails to Joburg to whoever that was involved with that one, then I said no, this is going to take me too long with the software although that EPIC would have been a good system to the reports.

Interviewer: So you mean your projects continue even though you are not using the system?

P5: Yes, because I am using the spreadsheet. I have got ways to monitor my projects reporting. I am using Excel.

Interviewer: If it happens that your project is delaying, what impact does that have on the organisation for your projects not meeting the scheduled time?

P5: It depends on what was the purpose of the project. If the purpose is to remove a speed restrITion, then it has a big effect on delays. Trains will be delayed, trains will be late, commuters get fired from their jobs because of train delays. The impact will vary on the minority or the major project.

Interviewer: Was the delay because there was no integration between project management and your supply chain management processes or was just a normal delay? What causes the delay?

P5: It's a two-way system; sometimes it is caused by procurement processes, sometimes it is caused by the contractors, sometimes it's us project managers. We start the projects with no material. We don't have material but we go on projects. When the tender is awarded we start to struggle to get the material and then the material and maybe the contract is left with two months so we need to apply for extension. Sometimes you put in there that the contract is six months then the contract gets awarded on this month then payment issues. The contractor does not get paid then the contractor stops working for two months.

Interviewer: What causes them not to be paid? Is it because the project manager didn't sign the invoice or what?

P5: Sometimes its contractors who do not understand that, because on our contract it says they will be paid within 30 days of approving their payment. As soon as we approve their invoice they will be paid within 30 days. But with Finance, they say upon receiving the invoice, they will be paid within 30 days. Your GCC's, your E5 contract documents that we use, states within 30 days but when you get to Finance they say 30 days.

Interviewer: Does the organisation have a specific contract they follow before they award or during the award of contract?

P5: We've got an E5 contract and GCC. Those are the often one we use.

Interviewer: If you are saying there is a financial problem, have you had a meeting with Finance department where you as project managers and Finance discuss that issue because if it is causing a delay so therefore it should raise some alarms?

P5: It's not their choice, it's the SAP system; that's what they say, it's a SAP system.

Interviewer: Yes, but what I am saying is its causing a delay on your project. What is the way in which you guys can resolve this thing? Is there a way?

P5: There should be, managers, they should deal with it at higher level. They have to fix our system. It's not to do with personnel. It's a SAP system that they are using the Finance department.

Interviewer: It means that the organisational strategy and Procurement and Project Management do not talk together because we believe that the system is brought in by the strategic executive people in order to solve the problem.

P5: Remember, for them, they are using SAP system to pay all of these things, but they are not using the SAP system to manage the project. I think it should be the same; when you load the project, you should monitor the project with that SAP system.

Interviewer: Do you think there is a capability within that SAP system that you can use to close that gap?

P5: Unfortunately, I do not even know how it works; I have never used that SAP system.

Interviewer: When you have to pay your contractors, what do you do?

P5: It is a manual invoice, Excel.

Interviewer: You are a project manager but you do not have SAP access to pay your contractors?

P5: No. Remember, on us we get those invoices from the contractor then we create the certificate. As soon as we create the certificate we submit them for approval. The finance guy logs those on the SAP system whereby it will be released now but the approved manager of that project of the department, if I may say so. They must release from the SAP system, it's them who are able to operate the SAP system. Remember we are appointed for me I'm a technical officer that's what we are called we are technical officer. I became appointed by a project manager who is at this stage a regional engineer, which is [name deleted]. He appoints me as a technical officer so to take his responsibility of monitoring the projects then he will approve other payments, and so on.

Interviewer: As a technical officer, you do not have SAP system so all the payments go to the regional engineer.

P5: The certificates, remember it's a hard copy of a paper certificate done on excel. We've got a template of certificate. We bind it together with an invoice from the contractor then checks with the quantities that's already there from Excel, the quantities that the contractor has done as it shows with the amount there. Then it approves it, then takes it to Finance. Finance loads it on the SAP system. On the SAP system, it's going range it back to the project manager, which is the regional engineer, release that payment that he has signed for.

Interviewer: Maybe more or less how long does that process take?

P5: For me, I have to approve the certificate within two days. If a contractor submits a claim, I need to verify the quantities. Are they correct? Is this the same quantities? Is he claiming for the quantities that he has done? And then [I] assign it on that day and take it to my boss and my boss approves the certificate to load this thing on SAP system finance.

Interviewer: It does not impact on your schedule of your project?

P5: It only impacts when people do not go onto the system; they are not aware that there is some payment that they have to release.

Interviewer: How do you let them aware, is it the system itself?

P5: I will not be able to answer that one; I don't know the SAP system how it works. Finance they can be able to answer that one.

Interviewer: Do you think there is a gap between project managers and procurement processes in terms of impacting on the delivery of the project? (Even if you do not involve them in planning)?

P5: By the mere fact [that] we are not in the same building there is a big gap. I don't see a necessity to involve them in a planning. Remember, they know their duty and we also know our duty but I don't know whether we know each other, how we help each other to oil this machine going forward. Now it's a matter of how do we keep this vehicle going without any constraints.

Interviewer: Do you have some joint conferences or forums where you guys meet and discuss issues of concerns from your side as project managers and they might come with issues of concerns from their officers' procurement.

P5: I think P5 used to be Finance, Supply Chain, us project managers, to report on our projects. Each project manager reports on projects, the status, and the hiccups. The Finance will answer and Supply Chain will answer but now I only see project managers in those meetings.

Interviewer: What happened to Supply Chain?

P5: I do not know.

Interviewer: What role did [name deleted] play in the organisation? What is his role currently and previously?

P5: He was running the infrastructure projects. He was a project coordinator.

Interviewer: Did he start this because of the gap or just to get the projects up to speed?

P5: Unfortunately, I do not know; when I came in there was already this culture of CIP Project meeting.

Interviewer: At the time where you guys were having meetings together with Finance, project managers and SCM, was there any progress on your projects and compared to now, what is the difference between the time that you guys were having collaborated meetings and even now? Did that collaboration help?

P5: There is no way I will say there is progress maybe depreciated and so on. I have not used any measuring method but what I will say at least at that time we would get answers during the meeting. At least you get answers face to face rather than writing emails all over the show. You will be able to come out with an understanding why your project is being delayed what is the story for Supply Chain. They will be able to understand what is the impact that it has on delaying that project.

Interviewer: If you can be given an opportunity to lead or to be an overseer of the two processes for three or two departments which are Supply Chain and Project Management and Finance, what improvements that you can bring that will add value or to help you to execute your projects on time? If you are a leader, the one in charge or executive where all these people report to you?

P5: What I notice is that this thing is not a regional problem; it is a national problem. If things would be approved, there would be some certain projects of this amount should be done within this region, it should be just a report sent to head office. The problem is most of these things should be approved at head office so now it delays the processes. Just a tendering process, just imagine it takes about six months to eight months just a tendering process for project to be awarded. Awaiting all this screening all those things.

Interviewer: Is there any available policy that the organisation is using at national and at regional level, do they follow the same?

P5: Yes it's a procurement policy, PFMA we following that one.

Interviewer: Out of that then, it didn't come up with a procedure?

P5: Remember another thing, how it matches these things, we are running engineering projects. Engineering projects are run through CIDB but with us, Metrorail, we were given just a certain document that you have to use this document and this document is not a CIDB related document. There is some contradITion with this document, with CIDB. CIDB is also a body as well as of engineering that deals with all the construction works projects and so on. Tenders are advertised there; CIDB has got a grading and they have got their own standard document that we must use when you [are] tendering, but we were given the other document, which is also not CIDB related and that document there was nothing like, ok here is a draft engineering, can we discuss about this document how it affects. All these things come from Head Office. We are being told what to do.

Interviewer: Let us say now you are an accounting officer for the whole organisation. You've got these issues that you already outlined, these gaps, what do you think can be done if you are an accounting officer or you are someone from outside or wherever or you need to account to you need to account to the president or whoever in the country? What can you do to make sure that this thing work?

P5: As I say, people who are up there and those executives need to come up with the systems that are usable reliable for us. Combining those departments or heads of departments that are affected when it comes to running projects, then come up with a system, then they need to listen to the people that are using the system. Where is the struggle? Why are the projects being delayed? Take all those answers and come up with something. If my answer as engineering is blaming Supply Chain, I am also blaming Finance, and so on, so you need to get to Finance. What is the problem, why are you not paying contractors? They blame contractors and they blame engineering and maybe Supply Chain, get to Supply Chain, What is the problem? Then the Supply Chain will also put a blame. Take all these blames, same thing that you are, that's researches. Those are the research that will help the organisation.

Interviewer: So is that something that you would do if you were given an opportunity?

P5: Yha, remember you have to research. I cannot come up and say ok I am changing this thing without proving that this process was not wrong. I have to research first what is the problem with this current situation? Do you have a problem? Why are these projects delaying? Then I have to get to the solution, how would we solve it, but I would not do it on my own I will also do it with the departments that are involved or that are affected.

Interviewer: Thank you very much for your time.

APPENDIX D6: INTERVIEW WITH PARTICIPANT P6

INTERVIEW WITH P6 (WC BUYER)

Interviewer: I want to find out from you, seeing that you are dealing with procurement processes, if you perhaps uncounted any misalignment between the two processes.

P6: There is, there is normally in any business but here at Metrorail the biggest misalignment is sometimes that, I do not understand as a procurement person project management principles and processes. And, on the flip side of the coin you guys as project managers also don't understand the nitigrity staff when it comes to procurement processes and especially with procurement processes that can hinder a lot; it's the timeframes. The timeframes the certain procedures that we need to follow of submitting certain documents to various people for authority or for just signature and that is normally where this misalignment comes That's the biggest holdup. Certain processes I think project managers does not get explain too much how the procedures work, how certain processes work, and certain authority figures that need to be called upon to forward certain processes. I think that's the biggest misalignment. And I feel that especially the two groups together when it comes to project management and SCM should try and figure out especially in the rail environment where we are in Metrorail we need to come and really work together because if we really work together it will be a walk in the park.

Interviewer: In other words, at the moment you feel that project managers and SCM personnel are not working together?

P6: They are not working how we are supposed to work. You should basically work off my hand and I should work off your hand. And in the lot of instances you've seen it also that it does not work.

Interviewer: Seeing that you also have this feeling that there is a misalignment, what are the factors or where do you see the gap? Where is the gap?

P6: The gap is basically knowledge of the supply chain policy because project managers need to adhere to the supply chain policy. It's basically just a lack of knowledge of the policy and the process within how we as a group, I mean project managers, SCM and Finance, work together. The holdup as you have noticed the real gap amongst us all, it boils down sometimes the SCM procedure and finance procedures.

Interviewer: Seeing that these people are supposed to be working together, are there any SCM policies that are designed specifically for project managers because now you have just explained the problem of timelines. Are there any specific procedures apart from the national ones that are designed to assist those people?

P6: I know when Mr [name deleted] was here, [he] designed, he had about two or three presentations. There are no policies that I know of from National. The only thing that is there is the SCM standard operating procedure that is next to SCM policy. You get the SCM policy the you get the SCM standard operating procedure which basically can assist project managers in explaining and breaking down the whole procedure of this side, how the whole operational procedure within the SCM works. That is apart from the SCM policy.

Interviewer: So It is not particular to them but It's just a ….

P6: It is basically a breakdown for in layman's terms for everybody within the company to understand how the SCM procedures work, but it's a pity [name deleted] was not here because [name deleted] made it easier. He had a presentation and unfortunately he had it alone in his laptop.

Interviewer: At the same time as much as you have your SCM policies, which are your internal policies, but at the same time you need to use PFMA. Do you have all the committees that are enshrined on the PFMA?

P6: We've got all the committees. We've got starting off the Bid Specification Committee and then heading on to Bid Evaluation Committee, both at the regional level, and then we've got our Regional

Procurement Committee that's adjudication committee basically. If you go up to national, there is a National Tender Board, National Adjudication Committee and then there is the Corporate Adjudication Committee and everything higher than that is at the GCEO or straight to the board.

Interviewer: So you mean segregation in terms of amount of tender, for instance, do you also do five million tenders?

P6: Yes, the policy will guide you; it's just basically between regions we only go up to ten million within the region. Higher than ten million goes up to national.

Interviewer: The same terminology that is used in the PFMA, is it the same terminology that you are using in the region?

P6: Exactly the same. We are guided by the PFMA. The Treasury guys just do what these different committees should be doing and all the laws. They change a lot of things as we go on, every year there are changes, as we need to adapt and implement it.

Interviewer: So you receive new copies every year?

P6: No, [Senior Buyer's] job is to sit and check all these changes. He is basically the one and he has got to make sure that all these compliances fall with [name deleted]. Whenever something changes, [name deleted] needs to make sure that it needs to be implemented.

Interviewer: With the current procedure that is on the standard operating procedure, do you feel that there is something that needs to be changed or according to you is it perfect as it is?

P6: It is perfect as it is because it strITly how the law dITates us to work. If we do not do it that way, we are going to have some serious audit findings and serious problems heading our way. It is perfect but as you know any standard operating procedure, as times goes on, that you realise that you have certain flaws in certain things. Every tender is different; you do not find one tender that is exactly the same as the other tenders. That's why I say the guidelines within the operating procedure guide us perfectly to what we need to do; it keeps us safe as SCM staff, it's going to keep you safe as a project manager at the end of the day and if you've strITly follow to what those operating procedure and the policy state and your contract document says. I doubt it you are going to sit with a lot of problems will arise that's why the committees are there to sort out certain issues that's why the adjudication committee is there if problems arise.

Interviewer: I know that you are an SCM person. I need to know from you if you know of any project management processes within the organisation?

P6: Certain project management processes is enshrined in our contract.

Interviewer: Which contract?

P6: The contract that we settle with the supplier. That's normally processes that the project manager dITates. But from my point of view, from an SCM side, to be honest with you, I've never dealt with basic project management processes.

Interviewer: Is it maybe because you guys, there is a separation of duties?

P6: Yha, it is because of the separation of duties. Look, you guys, when you have your project management workshops, certain issues like the CIDB grading and staff like that we are involved because the Act requires us to be involved. But other knowledge, as SCM person, would also like to gain certain knowledge regarding project management to be honest with you. But it's going to end up me being a project manager.

Interviewer: I hear that you are saying you do want to know, but what is stopping you from knowing, from taking project management courses so that you can have that understanding?

P6: Nothing is stopping us; it is just that maybe we are too lazy to do it or maybe we do not want to do it because we expect, it is like a segregation of duty as you say, we feel it's your job.

Interviewer: Within the region, we cannot run away from the fact that these two people are working together, which is project managers and supply chain personnel. Are there any forums that are being created internally where these two people meet and discuss issues?

P6: The only forum that is currently there is what the process requires; the committees used to say that it's the Bid Specification Committee. And then normally that interaction where you as a project manager comes to a senior buyer and deal it, but I feel that, say you guys have normal project management workshops just to beef up your skills a bit, I feel as you say and as it is mentioned earlier that it is wise to get especially senior buyers involved. They are the guys that work hand-in-hand with you guys as project managers because at least somehow those senior buyers can obtain information. Thirdly, in maybe a report back workshop and I feel that is not enough because as it is in your industry as a project manager things change every day, things change every year for you guys. New legislation come out for you guys and I feel that SCM needs to know about these things. But, here we work especially at Metrorail and its coming back to that gap you said earlier we working clusters. These ones work there SCM feel they just need to do SCM processes and staff like that. Project managers once they've got their workshops regarding certain changes or whatever, say if you came to an SCM person for this last three years or last six years of buying this thing, now this thing staff changes every year you guys get presentations regarding these things involve the SCM person because it makes things easier.

Interviewer: Your SCM processes, do you do them manually or they are automated on the system?

P6: Certain processes are done not manually; everything is system bound, but just, you need to understand that certain things get done on SAP and certain things get done on other systems, like Excel or whatever, whichever system in setup basically to do this thing. But there is a segregation between different systems, especially when it comes to contracts.

Interviewer: You using SAP?

P6: We [are] using SAP for it. We basically only use SAP once the contract is concluded, once the tender is basically concluded.

Interviewer: Before that is it manual work?

P6: On DM5 yes. All the work is done on DM5 once it goes over to being a contract, then it goes over to SAP.

Interviewer: Do you read the organisational strategy? Do you feel that there is a linkage between the SCM strategy together with the bigger strategy?

P6: Our only link is just basically via Treasury and trying to do what Treasury guides us, but last year we were in a workshop regarding just normal PPPFMA and regarding few changes that happened in the PPPFMA and the way forward.

Interviewer: Do you guys from SCM have planning because as project manager when you are doing your project, there is a phase where you do planning so do you also have planning?

P6: We also have a planning process in place, especially [name deleted], [he] plays a big role in there. We have a lot of planning processes in place because we need to adhere to certain things. Certain reports that we need to submit to Head Office. So a lot of planning goes into it, especially for a year's work, new financial year and stuff like that. Here we are sitting with the audit; it has been planned since last year already, there is a lot of planning that goes into it.

Interviewer: In your planning, do you somewhere somehow sit with project managers? Is there any alignment of the planning with the two processes? If yes, at what stage do you guys do?

P6: The only time SCM starts planning and working hand-in-hand with project managers is when project managers basically invite SCM to sit in on their budgets their planning wish list. Remember, our work is solely on your guy. We can only start to plan on certain things especially contract wise especially project management wise once you guys play open cards with us as SCM to say listen guys we want to do these things this year. But I know there are interfaces between different HOD's and SCM management regarding that.

Interviewer: So do you agree that at some point there is a planning where SCM is here jointly with project managers?

P6: There is, I know of it.

Interviewer: At what stage again?

P6: It's basically at project management planning side. You guys need to come up with the plan for a year or two years or three years or way ahead. Once you guys submit it to SCM management then the whole plan starts. But it's basically hand-in-hand; we are only reliant on what you guys give us because we don't work with your budgets and we don't work with your finances. But I know there are a lot of planning mechanisms in place, especially when you guys come and sit down with your budgets and your three of four year forecast what you guys want to do. That is the type of planning now, at least SCM will know. [Name deleted] can do her planning and prepare senior buyers, and tell listen here, this and this is available. When these things come and we expected it and you can just run with it.

Interviewer: P5 thanks very much for your input and please allow me to come back if there is anything. Thank you very much for your time it is very much appreciated.

P6: You are welcome you can come back. If you want to go deeper into our treasury guidelines and compliance issues, speak to [name deleted].

APPENDIX D7: INTERVIEW WITH PARTICIPANT P7

INTERVIEW WITH P7 (PRASA TECH - SENIOR PROJECT MANAGER)

Interviewer: Morning P7, how are you?

P7: I am fine mam.

Interviewer: My name is Pamela. Please allow me to conduct this interview with you. I am doing a study that seeks to explore the misalignment between the two processes, which are your project management processes as well as procurement processes. Do you feel that in your organisation you do have a misalignment on those two processes?

P7: There is, because you find that Supply Chain, they stick to company standard, yet with project management we stick to, we aligned with PMBOK, so we still need to pull the two together.

Interviewer: What procurement processes that your organisation is using that you are aware of or is there a standard procurement processes that your organisation have?

P7: Its currently being drafted, which is aligned to Treasury act and also aligned to PFMA, but it is still to be approved by the Board. There is an old one that had to be reviewed, and fix mistakes, upgrade, improve; from there it is currently being prepared to be approved by the Board.

Interviewer: So which one are you using now? The drafted one and drafted by who?

P7: We [are] using the old one. There are consultants who are appointed they came in from all different units for input from us, which we provided even technical input as well.

Interviewer: Do you have a procurement policy and what is your understanding on your company procurement policies?

P7: There is, it is very old and out-dated, and then with the changes in BBBEE it was not updated with the changes in construction regulation, it was not updated, thus the new policy which is being updated now to align.

Interviewer: As a project manager, are there any procurement processes that are specially designed to assist you guys as project managers or is it only one process even if you are buying a book or …?

P7: It is one process; however, in this current new one at least we have provided input. We have provided technical input in terms of built industry norms and also PMBOK as well. That is why now we have this new one, which is being finalised for approval by the Board.

Interviewer: Which is procurement policy?

P7: Yes, procurement policy. Remember it is a procurement policy. Underneath the procurement policy will be processes on how procurement should be done. Procurement of construction projects including electrical projects and so on, which is little bit different from buying [an] exercise book and coca cola drinks because in small items I think it is a quotation system; you find out that it is a quotation system from the list of database of suppliers they compete, and so on and so on. But, if it's a big magnitude it goes on public tender, so when it comes to construction projects we always go on public tenders but of cause there are requirements in terms of CIDB grading for contractors' financial muscle BEE and so on and so on.

Interviewer: You spoke of a PFMA so my question is your organisation do you have standard committees that are in the PFMA like your procurement committees in the Supply Chain department? Your committees, are they the same as the one in the PFMA?

P7: Yes, they are the same in fact they are being incorporated in the new policy. That is why in terms of the new policy again we now have the BSC, which is the Specification Approval Committee. Every specification for every tender before it gets advertised it goes through this BSC committee. Once it is approved, from there on, then a project manager can prepare an RFT of RFP to out on the market. It was one of the mitigation measures to fix the procurement processes.

Interviewer: When are you expecting to have this policy or process finalised?

P7: Hopefully next board meeting, November, because after November the next board meeting is in February 2017.

Interviewer: So you are confident that the new policy will assist the project managers?

P7: It will, although the only advice to them is that in project management, especially in construction project management, you move with times, now and again it needs to be relooked at review, check what has changed on the market, then update it keep on putting those addendums there.

Interviewer: On the procurement policies, do you manage any of the processes in the procurement process?

P7: Yha yha yha, as an end-user you find that a guy is a project manager and represents [the] end-user. During the opening of tenders, he is there to check in terms of responses. Where there is no consultant, Mr project manager at times check your BOQ's arithmetic and so on. Sometimes you will even be appointed as an evaluation team member as a project manager.

Interviewer: But the question is do you manage the entire process?

P7: Not solely, because remember the process, because remember the process is managed by Supply Chain, which is a support function. So they support me as an end-user but I work closely with national sourcing specialist. I work closer with the contracts manager in terms of drafting the contract and I work closely with the HOD of Supply Chain. But the project managers do not solely manage the process, which is a bit of a deviation from PMBOK 9 knowledge areas in terms of procurement management.

Interviewer: So you feel that there is a need to improve the current process?

P7: Not to improve because that will mean you are changing the company policy. You find out that it is a fair enough role you play as a project manager, but you are not solely managing the process.

Interviewer: What are the project management processes that your organisation is using? Is there a standard project management process that you guys are following?

P7: No specific one. Luckily I drafted one which I still trying to push it to be approved, which is a project execution process with templates in terms of a construction project, not buying cool drinks not anything.

Interviewer: That document will only assist construction projects?

P7: Will assist construction and engineering projects. Again that process. I'm trying now to pull in our SAP system, pull in our supply chain process, then pull in the industry norm as well combine it together so that you get a new project manager you say this is how we execute projects here. You bounce a document on his table; he can take any project then and is guided accordingly.

Interviewer: Your project management process, the one that you are using currently in the organisation, is there any policy that is guiding the process?

P7: No specific policy as such thus if this document could be approved.

Interviewer: Of which you don't have?

P7: Currently we do have but you find out that it's not [an] approved standard per se; however, let me say, project initiation, we do have EPIC, that Enterprise Project Management tool, but again it's not talking to construction it talks to PMI if I may say Project Management Institute and PMBOK but construction is a…

Interviewer: But when you are recruiting, it must be a requirement that a person must be…

P7: It is a requirement but at PRASA, project managers have been climbing the ladder from the lowest levels until they get to project manager. And the guy you find, the guy does not have a clue of construction or engineering built environment, but he's been promoted or moving from one department to another until he is a project manager. That has been a cry since.

Interviewer: Tell me, your project management process, is it automated, or is it manual at PRASA generally?

P7: You see, PRASA, I'll say it's a half baked potato, half automated, that's why EPIC, EPIC it's a tool where you feed in information upload documents; it gives you a dashboard, you see its automated but you upload.

Interviewer: What is the impact on the organisation for not meeting the project deadlines due to the failure on either procurement processes or project management process?

P7: Loss of time and money and poor service delivery, that's all. Station is not finished, the depot is not finished, or the train is not finished, to be maintained, it does not get there early and there is loss of time as well plus money as well. Poor service, that's why you guys burn trains in Cape Town.

Interviewer: So people are burning trains because of the failure of the projects?

P7: Yha, failure of the project, as a result trains arrive late because in terms of maintenance scheduling at the depot, it was scheduled for one hour and ended up taking three hours, and therefore when it comes to operation they deploy it late to the line; or sometimes it won't even be deployed, there is no spares.

Interviewer: Can you give me an example of a project maybe that you were once involved in and it happened that it was not delivered on time maybe due to the fact that you were delayed by the Supply Chain department processes?

P7: It is one of the current depots to be honest, Salt River depot. Supply Chain, they overlooked the DTI requirements. As a result, when we did evaluation, we had a probity officer who's more of the auditor of that evaluation process. He sits and observes, but her view, when she wrote her report was that, guys, if the DTI requirements are not met in terms of the exemption that was given to PRASA and their rolling stock, then it means your whole process has got flaws. When that report got to the Board, the Board then decided to say, guys, PRASA will be challenged by these big companies, therefore this process needs to be cancelled, be redone, but let's make sure we get all relevant exemptions and whatever, whatever, to be in place, thus we are going to have to retender now.

Interviewer: Definitely there are consequences, what are the consequences that the process owner faces?

P7: He was only told during the board meeting that he will be fired but he has not yet been fired.

Interviewer: So the person was only told in a board meeting and is still here?

P7: He is still here.

Interviewer: So it means the company has accepted the consequences?

P7: The Company has accepted. Normally in big companies you will find that some companies, like state-owned, they do not fire; rather, instead they redeploy a person because you find that politically

they have a different mandate that I do not want to talk much about it. State entities, there is always political interference. Because a guy will tell you straight that I was instructed to do it like this. So if he was instructed to do it like this he is going to be covered. He is not going to be fired but redeployed, but another guy comes in.

Interviewer: Oh so there is a political interference?

P7: Yes; state-owned government and tenders.

Interviewer: Tell me, seeing that you are agreeing that there is a misalignment on these two processes, the question is, is there any forum where project managers and procurement officials sits in one room to discuss matters of concern between the two processes?

P7: I think we do have a project management forum where all stake holders come in, discuss the project issues, the project constraints, what are challenges, be it budget, be it process issue and whatever. The current policy or process improvement emanated from there in terms of closing the gaps where project managers were crying. Supply Chain capacitates. Supply Chain employs more people. A contracts manager is not there to sit in the office; a contract manager must work with the project manager through the entire project. Progress meetings, execution he must be here. Here you have one contracts manager, 14 billion projects; you know what I mean. He does not have a clue of what is happening or whatsoever; yet, he is a contract manager.

Interviewer: How often do you meet to discuss matters of concern?

P7: It's once every three months, but if urgent issues or matters, the team meets or relevant affected people, they do meet.

Interviewer: If you were to be given for instance a position where now you have powers now to make sure that you align these two processes, project management so that they talk together, what will you do?

P7: Employ specialist people with built environment experience from the built environment, from project managers to supply chain, because supply chain, if you need a person, for example a contracts manager, you need a person who's got a clue of construction of the built environment. For example, in my view a good contracts manager will be a QS quantity surveyor. That guy makes a good contracts manager in construction and engineering projects. He knows about quantities, he knows about contracts scope change management and etcetera. Sometimes when it comes to technology and speciality, it kills the normal contracts manager guy who does not have built environment experience. So, capacitation with right people is a way to go.

Interviewer: Tell me with your projects that you are busy with is there a linkage with the organisational strategy?

P7: Yes there is. It all comes from corporate plan. You start from the units; the unit will have their strategy document in terms of what are projects that we planning in the next MTEF. From those projects, they come up with the strategy document and how are they planning to execute them. Once that is done, obviously you looking at success factors, execution plan, budget requirements cash flows whatever in the strategy document. That document goes to a bigger unit plan, PRASA Tech Plan, which is done combining all different functions and sub-units. Once that is done, PRASA Tech plan then it goes to the corporate plan. In terms of the corporate objectives, it gets aligned there. Then the corporate plan will have PRASA Tech, PRASA Tech, PRASA Rail whatever Operation, Capex, Risk, Security all of them are there. Then it comes to the bible, which is the corporate plan document. But it starts from the project manager.

Interviewer: You mentioned that you do get involved in the procurement committees, is that an alignment of some sort in the planning of the project or what? What I need to understand from you is that do you at some point during your planning phase of your project do it together with supply chain?

P7: Supply Chain, yha, yha, yha. I always say when I advise any project manager there is no way you can do your project without Supply Chain, because supply chain takes a percentage at your initiation

and tender stage then after that you left with contracts manager. So any plan of a project it is ideal and worthwhile to do it with Supply Chain because you commit dates there. Your planned dates, you get your actual dates, how many days did you lose any dates, you know what I mean.

Interviewer: What delivery methods are you using in your organisation like those, build, operate?

P7: Those are strategies that you can use when you deal with the capex projects. It can be community projects as well. You have about two or three options. One, you employ a third party where you push a risk to him. As a client, you do not want to design. You don't want to execute but you give it to this guy you give him only the money. One, he can build, operate and transfer back to you or he can build and operate on your behalf over a long term, but you push the risk there, you don't touch anything. The only advantage, you push the risk, but again it must be a good deal and a good supplier in that because I would imagine in the rail. It's exactly what they did in Gautrain – build, operate and transfer, which will be later. So Gautrain they built and they are currently operating this Mbombela; they will later transfer after 10 or 15 years.

Interviewer: To?

P7: Back to Gauteng Department of Transport province, this is the typical of the strategy they use there.

Interviewer: Do you have any ERP system that you are using in your organisation? ERP system like Oracle, SAP, or whatsoever?

P7: Yes, we've got SAP. In fact, we've got SAP and EPIC. Remember, EPIC I told you about because all the payments are processed on SAP. You load the project budget, you create WBS's once work is done you create PR, release PR, goods receipt, then you do the payment.

Interviewer: Do you believe that the SAP that you have, that it can integrate the two processes together?

P7: SAP is quite smart because I think it does integrate EPIC and project systems as well. There's project systems on SAP; by the way, yes, it does. The only thing that SAP does not do, it's not doing well in terms of real estate and property, but in terms of project execution, there is a good project system component which does the projects very well.

Interviewer: In your own understanding as a project manager, what can be a role that IT can play in making sure that those two processes are aligned?

P7: IT as a department?

Interviewer: Yes, IT as a department.

P7: Have a person who have a broader pITure so that if as a project manager, depending at what stage you go to that person for support, he will understand. That will minimise delays as well.

APPENDIX D8: INTERVIEW WITH PARTICIPANT P8

INTERVIEW WITH P8 (PRASA TECH - SENIOR PROJECT MANAGER)

Interviewer: Good day Mr P8, my name is Pamela and I am doing a study. My study seeks to explore the misalignment between [the] project management process as well as the procurement processes. Please be so kind to allow me to talk to you about the two processes. Like, I have already mentioned that my study is looking at the misalignment between project management process as well as the procurement processes. Do you feel that in your organisation you do have such a misalignment?

P8: Yes.

Interviewer: Can you please make a comment as to why you are saying yes or what have you observed?

P8: The issue is projects have definite timeframes that they need to be delivered at and procurement processes have a life of its own, which means it must go from this person to that person and at the time, the project is getting impacted or delayed. That's the big misalignment because then you cannot the projects, things, going at the pace you want them because they must respect the procurement processes, which are not aligned to how you want to deliver the project.

Interviewer: So you have experienced that misalignment in your organisation?

P8: Yes.

Interviewer: What procurement processes are you using in your organisation that you are aware of?

P8: The three quote system, would you call that a process? Tendering system RFQ, RFP. Those are more or less the processes.

Interviewer: Is there any policy that is guiding the process that you have mentioned?

P8: Yes, I think it is the procurement policy that is aligned with PFMA and all the legislation. It will be a PRASA procurement policy.

Interviewer: So you do have one procurement policy as an organisation?

P8: Yha.

Interviewer: As a project manager, is there maybe any procurement policy that is specifically designed to assist you as a project manager, or is it one process for all, even if you are purchasing a pen or requiring a service provider?

P8: I think the difference is the thresholds, so I wouldn't say we have one process. Let me put it differently, we have one process but the differentiator is the amount that you need to spend.

Interviewer: Is there a reason why is there no specific process custom built?

P8: I would say one of the reasons is I don't think PRASA has reached the maturity that it ought to be reaching when it comes to project management practises in PRASA. We have attempted to do a division that will look at projects delivery but then that division would then have specific guidelines and policies that help to ensure that project processes are supported. So I would say the maturity we have not ascended or reached a level where we can have things that are specific to projects and processes systems guidelines and policies that help to push the project.

Interviewer: You have made a mention that you adhere to PFMA. Do you have all the supply chain committees that are enshrined on the PFMA?

P8: I think so, for instance we have what you call your BSC, which is Bid Specification Committee, which helps in terms of making sure that your bid is proper before it goes out to the market. Then we have Bid Evaluation Committee, then we have committees that will then approve what comes from the Bid Evaluation Committee at divisional level and at corporate level, going all the way up to the Board depending on the threshold amount that you are spending.

Interviewer: The committees that you have just mentioned, do you manage any of those or some?

P8: No, not directly; it's on an ad-hoc basis. I think on a Bid Specification Committee you will participate as a submitter. You will compile the submission, so you would have to go and defend your submission but it does not mean you run the committee. When it comes to Bid Evaluation Committees, I think as a project management committee sometimes we are picked to play different roles in the Bid Evaluation Committees. For instance, I have had to participate as a committee member. In one instance, I have had to be a chairperson in a Bid Evaluation Committee. But I cannot say I run the committee because you get nominated from time to time.

Interviewer: Who is doing the nominations?

P8: It's the SCM (Supply Chain Management).

Interviewer: Do you feel that there is a need to improve your current procurement processes?

P8: I think a need is an understatement, I think there is an absolute necessity to do so; for instance, you can sit with the project that was approved in 2015 January. Let me put it differently, a tender that closed in January 2015, we are sitting in October 2016 the tender is not awarded or the contractor is not on site. That's a year and close to 10 months and imagine if you were to price anything in January 2015 and only to be told you can only start in November 2016 you will have to do a lot of readjustments in price and also it defeats the objective of trying to do the project because you want to go there have an effect and the company must benefit. But if you drag it that long, you erode the benefits in a way or it get compromised.

Interviewer: How long must that process take? What is the standard timeframe?

P8: The validity of what you do, like your pricing on the tender, is normally valid for 180 days, which is 6 months because the tender process itself, if you tender now I think you've got 21 days so that the tender is advertised and everything then you close it.

Interviewer: During that process where you find out that the tender is not yet evaluated like the 18 months or a year period as a project manager, what are your interventions to the process?

P8: Your intervention is to escalate, follow up, push, scream if you can, press the button if you can, find them. But its more hustling your way through pushing that this thing receives attention. Like you'll find things go to certain offices and they get lost and they need to be started again. You'll do submissions that disappear in the system then you need to restart. One of the things is we've got too many signatories. First you don't have to have so many signatories. Once you have more than 3 signatories that thing is bound to delay. Now, if you have 6 and they, you have to just repeat because the format changed and the template changed, not that the content is wrong.

Interviewer: What are the project management processes that you are using in your organisation?

P8: What is interesting is we don't have a set of guidelines and processes. When I joined PRASA, I never received this as a pack of how we run the projects. You bring your experience. That's the process you use and a collective experience and a collective wisdom of other people. But if you are a project management person you know that there is a PMBOK. But a PMBOK is a guideline. You can't use PMBOK in its entirety as it is. You pick what is usable and what could be acceptable within the framework of what the organisation is willing to accept. I can't give you one set and say these are the set of processes.

Interviewer: But is there at least a guiding document, a policy, that is guiding whatever, I don't know, like whatever process that you are using?

P8: I'm looking for one; I'm being serious. I'm looking for one and when I get it I think it will be a joyful day. Even yesterday I had a meeting and that was one of my issues because I was told that there are projects that I may not proceed doing because there were no feasibility studies; yet, I was given a mandate to run with the project, but then I'm saying, where is the guiding document that tell me you can't proceed with this unless this is done?

Interviewer: It looks like now it's an individual decision.

P8: But also, if I get an instruction that this is the project, then I will look at the merit based on what the project requires. Now, there is a disconnection there because you've got a project that has given a budget and when you push it through approval processes then somebody says but why are you doing that. But if there was a process and everybody was following it, it would have been blocked at that level to say but this doesn't because it requires 123. All it says there is no standardised approach there is no documented and agreed organisational set of processes.

Interviewer: Do you know if there is a plan in future to have some processes in place?

P8: As a busy body I think at some point I initiated it and I wanted to run it, and as I was running with it I was told there is a consultant that was going to run with it.

Interviewer: You do have an enterprise project management office; do they not have a project management process?

P8: I have not received one, I've never seen one. Maybe it's my error not to ask for one from them but for me, if you are a custodian of, for instance if you are positioned at a PMO level, you're out to be a custodian of PSG's (policies, standards, guidelines). There is no governance approach that is systematised that comes from the office. We have that but maybe there could be gaps in terms of not giving those documents that are supposed to be guiding project managers.

Interviewer: The project management process that you are using, is it automated or is it manual?

P8: It is so manual. There is nothing automated on the process.

Interviewer: So there is no system for project management?

P8: If you want a system, its SAP when we [are] paying invoices, realising monies, that is all. My understanding is that that system, I forgot even what it is, its more archiving, it's more throwing things like put your business cases, but you can't say it's an automated system.

Interviewer: You have never used that system because you do not even know the name of the system.

P8: Well I have not used it yet.

Interviewer: Is it not a requirement for you project managers to use the EPIC system?

P8: We are supposed to use it but I don't think the enforcement is right. Maybe I would admit the lack of discipline, but is EPIC really an automated project management system in the form that it is being used? I don't think EPIC does that in the way that we use it, do you understand? It is more the dashboard and archiving because with [an] automated system I should be able to update something then it triggers other processes. That's how my interpretation of [an] automated system is.

Interviewer: What are the challenges that your organisation is currently facing or experiencing with these processes, project management processes and procurement processes?

P8: It is the delayed approvals and the fact that, for instance, in projects you have variations because the world is not ideal and you are not dealing with all known knowns. When you heat that unknown you need to now do something to make sure the process still goes, but that thing may be a cost. Variations take longer. I'm not saying you should not follow the process but if procurement processes are aligned, then your variation turnaround time would respect the fact that the process must continue. They will

know that this thing, I raised it today, maybe within a week they must defeat that because remember you've got contractors; now you are going to have a double problem because as you dealing with this, the contractors are standing then they start charging you standing time, then it increases the project cost again.

Interviewer: I just want to summarised what you have just said, putting this into a manageable chunk like for instance, what is perhaps one challenge that you know of that your organisation is facing due to maybe a project management process that was not followed properly? The same applies to what is your organisational challenge that the organisation is facing due to a procurement process that was not followed properly?

P8: I would say when the project is cancelled because the process was not followed but you were not aware of the process. On the project that we did in Cape Town there was a problem with making provision for CPA (Contract Price Adjustment) in the procurement processes. After the project was finished we had to deal with that matter for 6 months with the supplier before we could conclude it. Contract price adjustment – I don't think it was checked properly because the contractor believed we have agreed on it while from the procurement person here believe it was not part of the contract, so the provision thereof was not properly clear and we were using JBCC, I think. One of the things that happened was the giving of site. Handing of site was supposed to trigger the start of the project, but the supplier was given the site to setup but not to construct and he misconstrued that as given the site for construction; hence he came with damages to say coz that project he was given a place for containers and stuff. It was in October, we only started with the project in January. But it's more a contractual issue, but it's within procurement, so it links between project and procurement.

Interviewer: Now that you have given me examples, what is an impact then in the organisation for not meeting project deadlines? Let us say you have an 18 months' project that you have been given to execute, then the project goes beyond that 18 months. What is an impact now on the organisation for not meeting deadlines but specifically due to the fact that a process was not followed, either project [a] management process or [a] procurement management process?

P8: There are various impacts. One of them, which is in your face, is time delay. The project is then delivered later than expected. Secondly, it ends up costing you more than what it would have costed you. Therefore, that outcome may not be achieved at the time it is supposed to. Some projects are supposed to lower maintenance after you deliver them. It means the maintenance cost is still high as long as the project is not delivered. Some projects are meant to bring more revenue; it means you are not getting the revenue because the project is not delivered and there could be legal challenges with the suppliers, which you lose money off course. So they are various and reputational because you have made commitments to commuters in some instances so you say things that you don't do. It gets worse because they will burn our facilities and trains. They will say you said by this time we will have a smooth journey but now it's not there.

Interviewer: What are the consequences now to the process owner?

P8: You will find out that what is becoming interesting in this organisation is that we are very sensitive to audit. The owner then faces the music in terms of you will have an audit finding. If you don't follow the process the audit will pick that up. Hence, I said the tarnishing of the image, then those things end up with the AG then the AG gives it to the Parliament Transport Portfolio Committee. Then you've got irregular expenditure and so forth and so forth because the process was not followed. It's called irregular expenditure because of the process not being followed. Can you see now the image reputation? The process owner faces, he can either be charged, a lot of things.

Interviewer: But those things are they happening? Does the organisation charge people? Do the process owners face the consequences?

P8: I have not heard an experience of seeing it directly, but I have heard that in some instances they have.

Interviewer: Is there maybe any forum where project managers sit in one room together with procurement officials to discuss matters of concern on the two processes? Earlier on you did mention that there is a misalignment.

P8: There is not a specific forum for procurement and project management processes. EPMO had made attempts in terms of, but it was more a galvanising project community at large to have cross functional discussions; at some point procurement was part of that. At a divisional level where we sit, I would not say specifically procurement project management process discussions, but at EXCO level sometimes you have to highlight that I am late because of procurement. Those discussions happen but [are] not designed to align the process, because you are reporting and you are pointing [to] somebody across the table, and that somebody across the table will also have to defend his case. So there is no forum for that alignment.

Interviewer: But then, if you do not have that forum, therefore it means you as an individual, as a project manager, you make efforts alone to make sure that [you] get assistance in trying to unlock some of the procurement challenges that you in your project [have], and if that does not happen, what do you do?

P8: Yes, you escalate. You seek support from your immediate supervisor and HOD and you can engage SCM directly. There is no corporate platform that I am aware of where these things you say now let's discuss between [the] project management team and procurement team. We air our frustration through our staff; in the end, sometimes things get better and sometimes not.

Interviewer: In your own words, how can your organisation align procurement processes together with project management processes?

P8: I do not think it is about aligning the two processes. Aligning the two processes will sub-optimise the whole view of trying to solve the problem. The view is looking at the whole value chain, if delivering the project and what are the hindrances at Supply Chain. It's not about just looking at these two specific things. Let us look [at] it from cradle to grave – what is the value chain to deliver the project and what are the things that need to be optimised in terms of doing that? By virtue of doing that, anything that is within you will be able to unlock without being specific to the two processes because you will confine it to the two instead of saying what would it take for us to make sure there is no hindrance from the time an idea is born of coming up with the project to the time where we deliver the project. If we do that then we will be in a better position to even see other things other than procurement that could be a hindrance because you could solve procurement now. Later on, you will say procurement is working fine but we [are] still not delivering. You have the skills and other issues that will make the project to be delivered properly. All I'm saying you cannot treat procurement in isolation of the system of delivering a project.

Interviewer: If you were to be given an opportunity to be a manager or a task to align the two processes, your advice is to look holistically on the value chain from the beginning to the end.

P8: What you are asking me, it presupposes; the only problem is Supply Chain and I am saying from where I am sitting I do not think it is only Supply Chain. You sort Supply Chain then it is something else.

Interviewer: Can you give an example of what can be other issues that are hindering project managers to deliver their projects on time except procurement?

P8: The availability of requisite skills within the project organisation. Do you have document support? If you do design reviews, do you have experts to sign off on the designs? Are those people readily available and so forth and so forth. Do you have schedulers that will be able to help you with the schedule or you become the scheduler, valuer, the project engineer; you become everything, you become a document controller, you become the admin support to yourself. That delays you imagine you have four projects and you do all these functions on your own. I'm saying that just but one and having the proper systems to support you. Do you have [a] proper human capital system because other people you may have to plug in and out, you do not need to employ them permanently? Do you have your QS for instance because sometimes your evaluation is not right? So it is not just one thing, let us look at it holistically and then from there then you know then you can prioritise and make sure that everything flows.

Interviewer: As an organisation, do you have a corporate strategy?

P8: Yes.

Interviewer: The projects that you are delivering, are they in line with the corporate strategy?

P8: I would say yha to a large degree. Our projects are trying to enhance the available asset base or increase the asset base, which is really in line with trying to make rail a backbone.

Interviewer: When you are planning your projects, when you are at a planning stage, do you at some point plain together with Supply Chain or Procurement?

P8: Elaborate on your question.

Interviewer: You have got your phases in a project, you [are] doing your planning during your scoping, during your projects planning your budgets and all that. My question is, your planning phase as a project manager when you are planning for your project, do you bring supply chain officials to be part of your planning or you just plan alone?

P8: We usually plan alone; however, I think this year we have had a situation where we had to include Procurement where we had to even to have a procurement dashboard of our projects from planning level till execution. Something that can be improved but it's not naturally happening. It's not a natural process. You will do your business case on your own, you will do your planning on your own, and then only when you need to, then procure services, then you will start linking up with them.

Interviewer: But you were saying only this year where you started; the question is what triggered that to happen?

P8: I think there was some realisation somewhere or there was some demand somewhere into knowing this year's projects, how are they going to be delivered and when, which normally we say, we [are] normally locked by the procurement processes and then the procurement team had to come in and show the procurement timeframes in our procurement, in our projects, at planning stage so that you could see BSC will be this, after that the tendering process will be this long, the evaluation process will take this long, then I will procure the professional team, then I'll run with them, then I'll start procuring the contractor. It was more trying to show their impact and showing what is feasible that we are able to do this year and if it's practical.

Interviewer: Is that something that you are planning to do from now going forward or was it just an *ad hoc* thing as project managers of this organisation?

P8: I think it looks more an *ad hoc*. There has not been much follow up on it as well.

Interviewer: In your organisation, do you perhaps have any ERP system like your Oracle, SAP?

P8: I would say we have SAP.

Interviewer: Why do you say, you would say as if you [are] not sure?

P8: To a larger degree, it is not widely used with a lot of features that could link projects like we have EPIC. It could have been nicer if EPIC can source from SAP and they could interrelate, then it becomes a better ERP tool when it can source from somewhere instead of you have this thing here you take it from here you put it there. Meaning, ERP works on integration. It is not integrated, you've got stand-alones, then you find yourself repeating, but I would say SAP as it stands, we [are]not really using it; we [are] using it for payments and contract management. Maybe that's where I have been exposed.

Interviewer: So you believe that SAP has the capability to integrate project management process and procurement processes?

P8: Yes you can, I think so. I think I believe so.

Interviewer: Do you know if your IT infrastructure has got a capability to do the integration?

P8: I don't have much trust.

Interviewer: What role do you think your IT department can play in integrating those two processes?

P8: IT can play a very big role in integrating the processes, but you need a lot of expertise and experience in that space, so it can, and widely so, because it brings visibility. So I'm saying somebody sitting at corporate does not know what is happening in my project without asking me. If I have loaded my schedules and I update them on the system and it's an enterprise system, he can trigger from the process and see what is happening.

Interviewer: But EPIC does have a dashboard am I right, so can't it do that?

P8: It is very manual and I must put a provision, I have not used it so I don't know what it's capable of doing. The enforcement of it is very minimal. You hardly hear anybody talking about it or using it unless somebody says hey, that report, we need it there.

Interviewer: Thank you P8 for your time.

APPENDIX D9: INTERVIEW WITH PARTICIPANT P9

INTERVIEW WITH P9 (PRASA TECH – NATIONAL SOURCING MANAGER)

Interviewer: Good afternoon P9, my name is Pamela. I am doing a study that seeks to explore the misalignment between project management process as well as procurement processes. Please allow me to conduct this short interview with you. Can you please introduce yourself and tell me what you are doing in your organisation?

P9: My name is P9. I am a national sourcing manager in the supply chain management area, specifically PRASA Technical.

Interviewer: I mentioned that my study seeks to explore the misalignment between the two processes. Do you feel that there is a misalignment of the two processes in your organisation?

P9: Based on what is happening, we might say there is a misalignment. But I think what we are currently doing now where we work with procurement plans, where the project managers, we all, agree that on the procurement plan and from our side as SCM making the project management office of the rules and regulations, that we need to adhere to that, is from the national treasury. To me there is no misalignment but we need to work together as project management office and SCM to agree on the timelines and stick to them while still observing the rules and regulations, including legislation from National Treasury.

Interviewer: Please tell me what are the current procurement processes that you are currently using in your organisation?

P9: We [are] using the PPPFA, which is aligned with PFMA, all legislated by National Treasury. PPPFA is [a] Procurement Policy Framework Act. I am sure you know about the PFMA.

Interviewer: Is it a national policy?

P9: It's a national policy which is a directive from National Treasury.

Interviewer: What is your understanding on the organisational procurement policy?

P9: Procurement policy gives you guidelines in terms of how do you go about sourcing goods and services. There's rules and regulations that you need to stick to delegation, which gives you guidelines in terms of that you also meet the PFMA requirements.

Interviewer: So you do have the procurement policy?

P9: Yes, we do have the policy. There is a policy that was approved on the 19th of august but we still waiting for processes and procedures of that policy.

Interviewer: 19th of august 2016?

P9: 2016, yes.

Interviewer: But what were you using before 2016?

P9: There were two policies that we had, there was an old policy of 2009 and subsequent to that there was another policy of 2014 which was not properly approved. So there was always this confusion of which policy applies, is it the 2009 one or 2014 one?

Interviewer: So the new one is not yet approved?

P9: The latest one of 19 August 2016 was approved but the problem with that policy is that we [are] still waiting for the process and procedures because it is a policy and you need processes and procedures on how you go about implementing that policy.

Interviewer: Is there any procurement process that is specifically designed to assist project managers or do you only have one procurement process for everything that you are buying or getting a service provider from outside?

P9: …

Interviewer: Meaning your project managers most of the time are using the tendering process as opposed to the 3-quote system?

P9: Yes, especially in PRASA Technical we work in capital projects most of the time and most of the capital projects are above 500 000 threshold.

Interviewer: You once mentioned that you adhere to the PFMA, do you have in your Supply Chain department all the committees that are in the PFMA?

P9: There is delegation of authority within the company. Delegation of authority gives you guidelines in terms of approval processes. Example, we've got thresholds; an amount of for example 25 million, it's within the regional approval level. If the tender is up to the recommended tender is up to 25 million it will serve at what we call [the] Divisional Procurement Tender Committee. If it's above the 25 million threshold, then it will go to [the] Corporate Procurement Tender Committee and thereafter it goes to the higher levels like FCIP and up to the Board level. This is where you look at the amount of the tender and it will give you guideline in terms of the delegation of authority where it has to be adjudicated and approved.

Interviewer: You as a person, do you manage any of those processes or some of the procurement processes that you've just mentioned?

P9: Remember the procurement processes that's with the tendering, anything that is capital projects and is within our PRASA Technical will start in our department as SCM. So everything that is capital requirement within PRASA Technical will start in our section, that is the SCM section.

Interviewer: The processes that you have, do you feel that is there may be a need to improve those processes?

P9: Remember now, like I said, currently from the approved policy of 19 August 2016 we don't have process and procedures. I wouldn't be able to give you a clear answer there. Once we have those processes and procedures and we implement them, I would be able to tell you whether we need to improve them or not.

Interviewer: I should think it will be an improvement of the previous.

P9: Yes.

Interviewer: Do you perhaps know of any project management processes that your organisation is using?

P9:

Interviewer: The question is, do you perhaps as an organisation have a standard process, project management process that is there that project managers needs to follow?

P9: When you say standard I don't know of any, but I have not seen a standard project management process.

Interviewer: You have made a mention that on supply chain side you have a policy now that is approved. From project management side, is there any policy from that side?

P9: I've never seen any.

Interviewer: Do you know if [the] project management process is automated or manual?

P9: Like I said, I have not seen any and I have not heard [of] any standard one. I am sure that there was a product that they were trying to use, but I am not sure if it is aligned with SAP or not.

Interviewer: Are you talking about EPIC?

P9: EPIC, that is the one I heard about when I started here, so I don't know if they are still updating their projects on EPIC or not.

Interviewer: What are the challenges that the organisation is experiencing on these processes, project management and procurement, what are the challenges?

P9: The challenges are there; sometimes I do not know if it is because of not having planned the projects correctly, is that sometimes the project managers will come and say this project is urgent, we need to fast track it. Fast tracking means, I will just make one example, now you have to circumvent somehow the procurement processes. One example is where they say no, you cannot take 21 days for the tender to be on a market before it closes. That is where we are having a challenge, where we are misaligned. Project managers are saying this thing is required like now and you are telling them of a process that in terms of PPPFA we are supposed to have this tender open in the market for 21 days to give people ample time to be able to pay their proposals and the project manager says I don't have time, this tender must close in two weeks and you tell them that you have to get permission that you want to circumvent the legislated process.

Interviewer: What is then now the impact on the organisation for not meeting project deadlines due to the failure on either one of the two processes?

P9: We failed to deliver our mandate as an organisation, that is, of providing trains on time.

Interviewer: What is then now a consequence that the process owner faces?

P9: I am just going to respond at high level. If we had a strIT performance contract as employees, the consequence would be, if you had targets in terms of your performance contract you don't meet those targets, let's say you were allocated 10 projects for this financial year and now you did not meet maybe 6 out of 10 projects, it affects your performance and maybe the consequence will be whether you get a promotion or you get disciplined.

Interviewer: But on a current situation is there any consequences that a project manager [faces], for instance, because a project manager would be a process owner when it comes to [the] project management process, and a Supply Chain official will be a process owner for procurement processes. What is happening currently in your organisation?

P9: What I know is we lose, we might lose money that was allocated by National Treasury if we don't spend that money within that financial year where projects were allocated money, and we don't meet those timelines. So those are serious consequences because if they take that money away you won't be able to implement the projects.

Interviewer: Is there any forum where project managers and procurement officials meet in one room to discuss their processes, deliberate?

P9: There used to be steercoms here where we try and deliberate on the progress on projects, and what are the stumbling blocks, and who has to do what so that the projects can [be] fast tracked.

Interviewer: How often were you meeting and did that help?

P9:

Interviewer: How often were you meeting?

P9: Divisionally the steercom was bimonthly before the EXCO because there will be a steercom and thereafter EXCO.

Interviewer: As a division, did that engagement assist you to move forward?

P9: I think it was; assisting people will ensure that from steercom they will go and action the items to ensure that the time the EXCO comes if the item was allocated to me to action I would have acted on it. It was helping.

Interviewer: As your own opinion, how do you think your organisation can successfully align these two processes?

P9: What is currently happening is we [are] working on procurement plans and we work together with project managers where we track every activity from the procurement processes up to the implementation of the project from the project management side. That is, both of us have got an insight into when is the project going to be approved by the Bid Specification Committee, when is it going to be advertised so, I think if we can follow that process because that procurement plan has got timelines and its even being submitted to National Treasury to help us to get the allocation of the money. The timelines we have in there, are you meeting them or not, and we have to give comments on if you are missing the timelines, give reasons, and what are your action plans.

Interviewer: From Supply Chain, when you are doing your procurement plans? Do you do them together with project managers?

P9: Yes.

Interviewer: When they are doing their project management plans, do they do them with you as Supply Chain?

P9: We do them together because that procurement plan is owned by us and them. Remember, we will populate from the approval of the bid specification, take it further to the time where we source a supplier of a product or service. They take over from there up to implementation. So its aligned.

Interviewer: If then you are having that joint planning, you should not been having projects that are not being completed on time.

P9: We have those timelines, like I indicated, as the process moves to higher adjudication committees we don't have control. You will have a project being completed up to the divisional level maybe it was completed end of May, then because of delegation of authority it has moved to corporate. Its standing there, we do not have control on it. The only problem is that the projects management side will say as it moves along through the adjudication approval committees that process is owned by SCM. It's owned by SCM up to a point; as it goes further up we don't have control on it.

Interviewer: You don't even have a way in which you can assist the project managers because what they are saying is that they are blaming Supply Chain by saying the buck stops here and now you are saying as it moved to the higher levels then you have no authority. It's like now you are now a middle person between the two. The question is, is there a way in which you as SCM can assist the person at the bottom knock and make sure at least it happens.

P9: Can I just say if a project is at FCIP level it's above the CPO.

Interviewer: What is FCIP?

P9: It is at group EXCO level, if I have to put it like that. It has gone through the corporate tender committee, they have supported it, and then it goes to that FCIP level before it can go to the board if it is above the FCIP. When it is at FCIP level, it is at executive level, it is at group EXCO level.

Interviewer: Tell me, with the projects that you are executing, is there a link with the strategy of the organisation?

P9: Yes, I think everything is aligned. There is a strategy; we implement projects in conjunction with the corporate strategy.

Interviewer: Do you perhaps have any ERP system in your organisation like Oracle or SAP?

P9: We've got SAP, we do have SAP. I think our SAP needs to be upgraded. We [are] still using the oldest versions of SAP but we do have SAP.

Interviewer: Do you think that the SAP system that you have has got the capability to integrate these two processes?

P9: It does if it is at a latest version. We've got the SAP that needs to be upgraded. Our SAP system is far behind.

Interviewer: What can be an assistance from IT, maybe, what assistance IT can provide in this organisation to make sure that the two processes are integrated?

P9: Is to ensure that SAP is upgraded to the optimum level so that projects can be tracked down on SAP; if you need to have access to look at the progress report, you are able to punch in to SAP to see how far, project maybe at your divisional level, maybe you are our end-user. As PRASA Technical, we want to see the progress on the capital project that is in our division. If SAP is at that optimal level you should be able to.

Interviewer: You were saying you do have SAP and you mentioned that there is also EPIC, so which system is mostly used by the organisation and what for?

P9: I'm going to speak about SAP because remember I said when I joined in 2013 there was a lot, there was talk of EPIC, but ever since then I haven't seen anything. I don't know if the project managers are updating EPIC or not. From our side, we are not using it but I am talking from my ex-experience with SAP. If SAP is upgraded and is utilised at optimum level, SAP helps with everything; not everything maybe for other people but my knowledge of SAP that I used from my previous employers I think SAP can help us. We have the system, you just have to make sure that it is upgraded and we utilise it to its optimum.

Interviewer: What are you using SAP for currently?

P9: We release orders on SAP, we load contracts for payments on SAP, and then we are able to run the spend on SAP.

Interviewer: So no project management, no managing of projects in SAP?

P9: From procurement side, remember you can do projects management on procurement load a project from a tender process and project manage it on the SAP system. We [are] not doing that and I do not know if the current SAP module or not but from my past experience I think SAP can do it if it is upgraded. From what I know there were corporate communication that they are going to upgrade SAP at one point.

Interviewer: But it is not done yet?

P9: No.

Interviewer: Thank you for your time.

APPENDIX D10: INTERVIEW WITH PARTICIPANT P10

INTERVIEW WITH P10 (PRASA TECH – PROJECT MANAGER)

Interviewer: Good day P10, my name is Pamela I am doing a study that seeks to explore misalignment between project management and procurement processes in the railway organisation in South Africa. Will you please introduce yourself.

P10: Thank you Pamela, my name is P10, Project Manager with PRASA Technical here in Johannesburg. I am working under the Perway and Structures division as a project manager, like I have said.

Interviewer: Like I have already mentioned to you P10, my study seeks to explore misalignment between project management and procurement processes. My question to you is, do you feel that there is a misalignment between the two processes in your organisation?

P10: The answer is yes. What project managers are expected to do on daily basis is not really aligned to the international norms and standards of project management versus the procurement requirements. We've got the PFMA in South Africa which everybody adheres to. We've got your ECSA Engineering Council of South Africa where we get our engineering specifications schedules and the rest. But here at PRASA the processes are not really aligned. That's all I can say.

Interviewer: What [are] procurement processes that your organisation is using?

P10: We've got open tender systems where the organisation prepares specifications and takes jobs out to the market to the competitive bidding and we've got the 3-quote system for goods that are less than 350 000. On top of that, in adherence to the PFMA we are currently in the process of tailoring the (when I say we I mean the organisation) supply chain management policy to suit the PFMA as well as the PRASA requirements haven't realise any procurement processes that address (I'm talking more of capital projects here) the requirement for capital projects but yes, that open tender system is still on-going but it needs a thorough revision.

Interviewer: What is your understanding on the procurement policies that you have in your organisation?

P10: We've got the SCM policy which unfortunately last year the Public Protector made a finding on that it was lacking on some respect. PRASA was instructed to go back and review the whole document but it did not come with SOPs, it did not come with directives. All those documentations that need to be available for you to implement your policy, they were left behind because they still need to go through the approval processes through FCIP which has also taken too long to sit and approve the documentation. So you will realise that you can't have a body without limbs or head and say you are normal.

Interviewer: Is this document replacing your SCM policy? Is that final?

P10: Look, yes, the powers that they say it is a document which has been implemented immediately after being passed out, but to us it's still lacking in some respects, it's not a complete document, I would say.

Interviewer: As a project manager, are there any procurement processes that are specifically designed to assist you since you have seen that there is a misalignment the current processes, the project management and procurement processes?

P10: The answer is no. Why do I say no that process does not exist? I would say things are done haphazardly here at PRASA. Say if you are a person in the organisation you will be taken through the documentation as to how the organisation performs its duties, especially the procurement, but that is not available at PRASA. So yha, there is no processes in place for me. It's just trying to adhere to the SCM policy which I think it can be better if there were processes in place.

Interviewer: The question is why are there no processes? Maybe something that you've never raised that maybe you are not happy with the current processes as project managers so you need something that is going to be customised to assist you.

P10: My worry has always been, PRASA is running a 14 billion budget. For an organisation operating with such a magnitude of a budget, why is it not quality certified like your ISO. If PRASA was ISO certified I think things would be much easier because you will have your processes, your procedures well documented and it will be a process of pulling out a process and following it in executing your projects. That is still lacking.

Interviewer: You mentioned the adherence to the PFMA, do you have all the standard supply chain committees that are enshrined in the PFMA in your organisation?

P10: We've got the Bid Specification Committee, Bid Evaluation Committee and some other committees. Yes those are available and the current policy advocates for the same. It's the directives which directs you to what the bid evaluation should entail and so forth with the rest of the committees.

Interviewer: Do you know if these committees are in the PFMA or not, same committees that you have mentioned?

P10: Yes, they are available in the PFMA.

Interviewer: Do you manage some or all of those committees that you have just mentioned?

P10: For you to be a member of a committee, of those committees, you have to be nominated by the chief executive. From my point as a project manager, I do make submissions to some of the committees and the only committee I have so far set on is the Bid Evaluation Committee where I was nominated by the chief executive officer. That was done through CPO (Chief procurement officer).

Interviewer: You sat in that committee as in not managing the committee or the process?

P10: No. I was a member of the committee.

Interviewer: Do you as a project manager feel that there is a need to your organisational procurement processes?

P10: Yes I really think so. To respond to your question, the first one is scoping. If the organisation can improve on scoping whereby various divisions [are] in liaison with PRASA Tech and the other end-user department, if they can get their scoping together then life could be easy. Specification also, it needs to be worked on.

Interviewer: You mentioned that you are sitting on the Bid Evaluation Committee as a project manager, is that the only committee within supply chain that you sit on or that you have been involved in?

P10: The answer is yes. I have not sat on any other committees but on my day-to-day endeavours in the organisation, I deal a lot with supply chain management.

Interviewer: In the committee that you sat on, do you feel that is there a need to improve their process in the bid evaluation?

P10: Yes. First and foremost, most of us were roped in the committee without prior training and the directives, so yes, there needs to be training. It needs to be improved not just training but to improve on the performance of the organisation and the employees. Such matters need to be prioritised.

Interviewer: What project management processes are you using in your organisation? Do you have a standard project management process that you guys are using?

P10: The answer is no. There is no standard process that is being used. It depends on the knowledge that each individual possesses. Some are using Prince 2 and some are using PMBOK. I'm one of those

that are using PMBOK processes to make my life easier. Like I said to you earlier on that if only PRASA was quality certified then I would say we are going somewhere.

Interviewer: Is there any policy that is guiding the project management process as much as it is not there, but is there any policy at least that is guiding?

P10: No, there isn't any that I came across and that's what we are on daily basis trying to get the organisation to adhere to so that they can realise the fruits of project management.

Interviewer: Your project management processes, are they automated or are they manual?

P10: They would be automated if PRASA, like I said, was ISO certified; at the moment it's all manual.

Interviewer: So you said your standards are PMBOK and Prince 2? It depends on an individual, which one suites you best?

P10: Not like suites you best, but what the project manager that has been appointed by PRASA is knowledgeable upon.

Interviewer: What is the impact on the organisation itself for a project that was not successful due to either a project management process or procurement processes?

P10: We've got a lot of delays, cancelations, we run into legal battles with suppliers.

Interviewer: What does that, those delays and legal what what, what do they do to the organisation?

P10: If you go the legal route PRASA will be taken to court and they will have to pay. That is expenditure that the Treasury does not expect to have been expended. Its fruitless expenditure and it will lead to delays and it's going to lead to commuters being frustrated; burning stations, burning trains. It's going to lead to personnel not being motivated, so there are a lot of factors that need to be addressed.

Interviewer: Have you been involved in a project that did not meet the deadline, and what you are saying now happened?

P10: Yes, I've got a project in the Western Cape which the contractor experienced delays and the contract is reinstated but it took more than a year and the contractor resorted to the court to claim for fees that were outstanding. PRASA does not pay without a valid contract so the contractor had to go the legal route unfortunately but PRASA ended up paying. That's fruitless expenditure.

Interviewer: Definitely there are consequences on the process owner be it a project management process or procurement processes. Remember there were some consequences on the company due to one of the processes. The question is what are the consequences on the process owner?

P10: Look, I think it is still coming. For me as a project manager, consequence management, which I will respond to as soon as it comes through my door.

Interviewer: At the moment, are there no stipulated consequences that maybe if you did not manage the process accordingly, these are the consequences?

P10: I've been saying that we have a lack of processes. If you have processes in place, there would be detailing exclusively that if you do not adhere to this process these are the consequences that one individual is going to suffer. I haven't come across any processes and therefore there are no consequences listings that I'm aware of except that on daily basis we are told that any non-adherence to processes, which do not exist by the way, will face a punishment from the organisation.

Interviewer: Is there any forum may that you as project managers sit in with procurement officials where you discuss matters of processes from both sides, which is project managers explain your processes to supply chain and supply chain explains their processes to project managers?

P10: It has not happened but it is something that has been discussed previously, so we are hopeful that it is coming soon.

Interviewer: Are you telling me that project managers at PRASA Technical do not meet at times with procurement officials where you are discussing matters or sometimes try to talk to procurement officials to assist you guys to unlock some of the things?

P10: It is mostly on *ad hoc* bases whereby a project manager would have a project that is going out on tender. In trying to tailor the specification, the project manager will liaise closely with Supply Chain Management for input and the document they will go to legal guys for their input. Yes, it happens but not as a collective most of the time, but on *ad hoc* basis.

Interviewer: if you were to be put in a position where now you need to head up a department, how will you make sure that you align these two processes for them to talk together?

P10: That is a tough one. First and foremost, there's got to be integration of ideas from various departments as a collective, consolidation of information and constant liaison with the other departments. In that way information will transcend across the departments that this is what Tech wants to do unlike it is a common thing here at PRASA that you will go to the region and the guys in the region would say they are not aware of what you are doing.

Interviewer: Let me rephrase my question. Here you are [name deleted], you have your project management process and your procurement processes; they are not talking together. My question is, what will you do to make sure that you align the two processes to talk together because initially you agreed that there is no alignment on the two processes?

P10: It is a tough one. PRASA as an organisation across the divisions, I am quite aware that the processes are not talking even to each other across the divisions, so, what I would do or suggest is that we come up with organisational processes. In that way my SCM will have an input, I will bring my input, and at the end of the day, things will be coordinated.

Interviewer: What is the linkage between the projects that you are delivering to the overall strategy of the organisation?

P10: PRASA as an organisation has set up its targets, the renewal of the infrastructure, which they call a modernisation. In there I realised that again, that there is, that procurement blends that is lacking. For the organisation to adhere to such processes and intensions there has got to be a same policy on the ground that everybody is adhering to. Unfortunately, they do not exist.

Interviewer: You spoke of modernisation, is the modernisation on your corporate strategy?

P10: Yes.

Interviewer: So the projects that you are doing, are they talking to the modernisation on the corporate strategy?

P10: Yes, my station modernisation the infrastructure platform rectification to be universal access compliant at the end of the day. The organisation yes has got those strategies and we are adhering to

Interviewer: When you are planning your projects, do you at some point plan them jointly with supply chain when you doing planning on your projects?

P10: If you look behind you, there is that chat behind the wall; it's a procurement plan which we have developed for the bridges around the country. Unfortunately is been overtaken by time. Why is that so? Because our Supply Chain Department is understaffed and there is a dire need for improvement, training of the staff as well as employment to increase the numbers so that people can attend to various jobs at the same time. We've got one contracts manager who is overseeing all the projects at PRASA Tech, which is not healthy for the organisation because you lose all your delivery times. So yes, this procurement plan was done hand-in-hand prepared with our SCM department.

Interviewer: What delivery methods that your organisation uses like, design build and operate. Do you have such methods?

P10: No. The nearest to design build and operate is our ten key projects, which only address the need for suppliers to provide PRASA with infrastructure design, construct and then hand over to PRASA.

Interviewer: Design build and operate was an example?

P10: At Tech, we are not into that at the moment.

Interviewer: Do you have any ERP systems that you know of that can have a capability of integrating like your Oracle or SAP, do you have any of those in your organisation?

P10: There's a lot of systems out there but PRASA as a government organisation has decided to go on SAP. SAP is one system that is available. Unfortunately, it is lacking in content. Most of the content is HCM-based and finance-based. Project Management and engineering wise I know from my previous life where I worked that SAP has got those capabilities.

Interviewer: Do you know if your infrastructure has got a capability to implement the integration of the two processes?

P10: I don't want to say much but I doubt. Yes for the services that PRASA purchased there is trained personnel in the IT department, but the rest, I've got my doubts.

Interviewer: This integration of the two processes, do you believe that it is something that can be possible to be done?

P10: Yes, where there is a will there is a way. All we need is management put their heads together and try to understand what the subordinates require and then it can happen.

Interviewer: Thank you very much P10 for your time.

APPENDIX D11: INTERVIEW WITH PARTICIPANT P11

INTERVIEW WITH P11 (PROGRAMME DIRECTOR)

Interviewer: Good day P11, my name is Pamela Malongwe. Please allow me to conduct an interview with you. I am doing a study and the aim of the study seeks to explore the misalignment between project and procurement management processes. Please introduce yourself and tell me what you are doing in your organisation.

P11: My name is P11, currently the programme director for rolling stock fleet renewal, assisting PRASA in doing so.

Interviewer: Do you feel that in your organisation you have such an alignment?

P11: Yha sure, there is plenty of that – the misalignment between the processes of procurement and project objectives themselves, there is quite a lot of that.

Interviewer: What are the procurement processes that your organisation is using?

P11: Being the government institution obviously the organisation follows the PFMA in many ways, in fact, they have to follow it to the letter being the schedule 3b organisation procures like a government, which means if you are buying goods whose value [is] over a certain threshold, I believe over 500 000, now you need to go on open tender process which should comply with various regulatory bodies like CIDB if its construction related procurement or any other prerequisite from the legislature. What that means is that advertise the tender, you have to adjudicate the tenders, you then award, then you do the contracts and you get somebody on board to do or provide the service that is required. If the value is below 500 000 they require you to do the 3-quote system, so you need to find three quotations from mostly approved service providers or they can go out to seek or source three after which they can award on the basis of the PFMA.

Interviewer: What is your understanding on your organisational procurement policies? Do you have a procurement policy?

P11: There is a policy, and the policy is pretty much governed by the PFMA. So it really tries to follow the requirements of the Public Finance Management Act.

Interviewer: Are there any procurement processes that are specifically designed to assist the project managers in your organisation?

P11: No, there is nothing specifically for project managers; it is just a procurement process and a policy for the organisation.

Interviewer: Is there a reason, maybe, why is there no such?

P11: No, there is not. Is there a reason why there isn't? I don't know at this stage because you probably need it.

Interviewer: You have made a mention that you are complying with the PFMA. Does it mean that you have all the committee that are enshrined in the PFMA?

P11: Those committees must be there. If you are procuring something for which you need to have a procurement specification it has to first go to [the] Bid Specification Committee before you can advertise the tender, that's another committee. Once the tender is been advertised, come back then there is a Bid Evaluation Committee, Bid Adjudication Committee, all those committees are there.

Interviewer: On the procurement processes, the ones that you have just mentioned, is there any process that you are managing by any chance?

P11: No, none.

Interviewer: Why are you not managing the process?

P11: Because I am not in procurement. That is managed by the Supply Chain department. We obviously being on the project. We don't manage the process but we apply the process because if there is a specification we will generate the specification of what needs to be procured. We will go to the Bid Specification Committee to present but the manager of the process is Supply Chain.

Interviewer: Is there a need maybe to improve your procurement processes?

P11: Great need indeed. A lot.

Interviewer: Which process maybe that needs an improvement?

P11: The greatest weakness of the current procurement processes in my opinion is the time it takes to make a decision when you have to go through the approval process. What I am worried about is the fact that we do not know how to manage those stages properly to ensure that we do not make a process that could be one month become six months. If you have a special dispensation in which you've got a dedicated team of people where you could have a dedicated procurement officer who is there to serve, the programme does not do any other operational procurement, but only serves the projects within the programme. That in itself will improve the time. If you have a dedicated team of people that are committees that do the bid specification, evaluation or whatever the case maybe who meet frequently and they know it's their task for that programme. You could probably cut down that six month to easily three months or even lessen that three months into two weeks and cut that. To me it's a management improvement that is required. It's not necessarily to say the committees and the dates are not necessary.

Interviewer: What are the project management processes now that you are using in your organisation?

P11: I would say the project management process used basically the very standard process that every project would use. (1) Business identifying the need, what is it that they need to do and if that is going to be achieved through a project. (2) Then there will be a business case for it. From a business case, then a project is sanctioned needs to be done, then you move into [the] procurement phase the normal way. (3) Every division is doing their own project management if you may so call. But besides that there is not really any special processes other than the standard PMBOK kind of processes that you will get.

Interviewer: You made mention that there are different units that are doing their projects wherever they are. Is there any standard process in the organisation that anyone must follow?

P11: No. Everyone for himself got for us all. It is like a free style, if I may call it that way. Quite frankly, there is no PRASA way of doing project management in the organisation. We tried through the programme in the war room; we were at least able to standardise that each project of course will have a project plan that should show this. In the reporting it should report this that we tried to do, but it was only for those programmes that form part of the rolling stock fleet renewal modernisation, not any other projects in the organisation. So if you go to a project manager somewhere in PRASA Cres in Cape Town, the way he does his projects is not necessarily the same way that the guy up here is doing his projects. He does it as he understands it.

Interviewer: Is there at least a policy that is guiding your free style as you mentioned, which serves as a guiding document?

P11: The closest to the guiding document that I have seen is probably maybe the upfront planning stages of a project, which is that before the project is done there is a business plan which is approved, which is then allocated a budget and then it can be executed from there. That is more or less the policy framework that exists from execution going forward.

Interviewer: Is there a document that is there that exists in the organisation where just what you have mentioned is stipulated?

P11: I have not seen the document; I have just seen people seemingly doing it and being asked to do it. P7 should be the one giving you that document because he is the one through the EPMO that used to manage that. I think he still manages that.

Interviewer: Your project management process, is it automated or is it manual?

P11: No, manual, everything is manual.

Interviewer: What challenges is your organisation facing in an event that the project fails due to a process that is not being followed properly, either [the] project management process or procurement processes?

P11: The challenge is simple in that in the end the business does not deliver on its objectives, simple. Either on time or never at all, and in the end it costs the business money, lots of it. Once the business is not able to deliver its commitments, it starts costing you money. So those are the challenges that the business (1) ends up paying more money for no value add, for no additional value, had we simply just managed the process properly. (2) We are not able to deliver on the services that we commit to deliver on in time or at all simply because those processes were not managed well.

Interviewer: Tell me, what are the consequences that the process owner faces then?

P11: To the time that I have been here, nothing. I have never seen anyone really taking consequences as a result. Yes, you would say that there are managers that have been moved out of positions and project managers that have left, but it was in my opinion never related to them failing to apply the process per se; there were many other things leading to their removal, so, no consequences really.

Interviewer: So in other words, the business just accepts the fact that the project did not even take off?

P11: Yha that is what happens they move on.

Interviewer: Is there maybe any forum where project managers and procurement officials meet in one room to discuss matters of concern between their processes, and how often do they meet?

P11: I was not aware of such a forum until when through the war room I will use the terminology for the ease of understanding. As we were identifying projects that were held back due to procurement, they were, such meetings had to be organised and they were done for the time. They met weekly to address those specific matters that were being affected but it was not something to my knowledge was sustained. We did it then issues were resolved for some; for some were never resolved, but the forum never continued to my knowledge.

Interviewer: How can a parastatal organisation like your one align these two processes?

P11: Very easy actually. My opinion for this to work well within the supply chain function, they must have two divisions or two departments or at least have a team which is dedicated to serve Capex procurement and that which is dedicated to serve Opex procurement and through the Capex procurement and having a delivery platform like the war room is. That's where alignment takes place because within the war room context the most important thing that you put before the people first is "walla" what is the business supposed to achieve in this financial year and if the business is to achieve that, which projects have to be delivered in order to enable that. And those project are known and everybody be it the project manager or the procurement person the finance person, everybody knows what is the goal which projects will achieve the goal and which projects they need to support then alignment is done easily it's not a difficult thing to do. It just takes the will and discipline to do it.

Interviewer: What is the linkage between what you guys are doing that is your project as well as the strategy of the organisation?

P11: Most of the projects I will say are aligned with the strategy of the organisation one way or another. If I look at the rolling stock fleet renewal programme, I look at modernisation activities around it; there is a perfect link in there. PRASA is admiring or aspiring to modernise the transport system into the future, aspiring to improve the service levels for the customer and those elements or those programmes will

definitely or had the potential to do that. The strategy will be realised when each of the programme is implemented successfully, but the programmes themselves or the projects themselves and linked and have the potential to deliver the strategy of the organisation.

Interviewer: When your project managers are planning their projects, are they doing that together with procurement?

P11: It never appeared to be the case from what I have seen. No, mostly they plan alone and they will hand it over to Procurement and wait.

Interviewer: Do you have any ERP system like your Oracle or SAP?

P11: Yes, there is SAP.

Interviewer: So do you believe that your SAP system has got a capability on it to integrate these two processes?

P11: Not now. The only support that SAP can give is in the finance control the control of the finance part payments and staff like that; that it is able to do, but not really integrating the procurement planning as well as execution thereof.

Interviewer: What do you think your IT department can do to assist the organisation in making sure that there is that alignment on these two processes?

P11: My view is I am not sure if I want to start in the IT department. To me, the IT department will provide the tools to make work easier and efficient. Before they do so I think the organisation first needs to know what it needs to do. At this stage I would say instead of the IT department working on the tools, I would rather be looking at the organisation to first understand how do they want to execute projects and then in the context of that policy framework then we bring the IT department with the support tools that will enable that initiative. EPMO bought a tool called EPIC, I'm told, intended for use by every project manager. Did they use it? No. So hence, for me the problem is not about what IT does, it is what the business does and decides then IT brings the tools to support that decision.

Interviewer: If, for instance, now you can be given an opportunity where now they are saying you are now the process manager. How would you make an alignment of these two processes work where now you have your projects being delivered on time because now these two processes are integrated?

P11: Firstly, I would make sure that I, the organisation consolidates on the implementing function of the projects, in other words, it should have tried to limit the scattered activities that are happening everywhere, elsewhere, and elsewhere in the business units and the organisation so that the capital stuff is implemented in a coordinated from a central point of view. Now when you have centralised or sort of consolidated the implantation, you do not have projects scattered all over the place. You know which projects are delivering, which objectives for which division. Ok, so all you need is alignment with divisions and alignment with the business. But it is channelled through one implementing agent. This is an organisation where what you do in the production environment every day in order to make sure that production is aligned material, are there people, are there tools, are there parts, are there and every you need is here. That weekly meeting was an example of equivalent system. Why do production people do it? They do it because they need to be aligned. So, it is not something that is impossible; it's something that certainly be done. That's what I will look at.

Interviewer: Thank you very much P11.

APPENDIX D12: INTERVIEW WITH PARTICIPANT P12

INTERVIEW WITH P12 (PROGRAMME MANAGER – EPMO)

Interviewer: My name is Pamela Malongwe I am doing a study that seeks to explore the alignment between project management processes and procurement processes in the railway organisation in South Africa. Will you please introduce yourself?

P12: My name is P12. I am currently working as a programme manager at PRASA.

Interviewer: Like I have already mentioned that my study seeks to explore the misalignment between the two processes, my question to you is do you believe that in your organisation you've got the misalignment between the two processes?

P12: Yes, I think there is a big disjuncture between procurement processes and speedy execution of projects within PRASA.

Interviewer: What are [the] procurement processes that you are using in your organisation? Do you have a standard procurement process that you are using?

P12: Yes, we have a standard process. Basically there is a threshold in terms of the value of projects that need to go out to tender. The threshold of these projects is 350; anything above that needs to go out to tender is decentralised to the divisions, so the divisions have a mandate to procure work under 25 million. Work over 25 million is procured by corporate. The process is relatively the same for all, which is corporate and divisions but the speed of execution is different, especially when it comes to projects that will require [the] CEO's approval or board level approval mainly due to the time that it takes for approvals to be done. Do I need to explain the process to you, let us say the standard procurement processes we have in PRASA?

Interviewer: Please P12.

P12: I will speak with the view of construction projects. Once the professional team has completed designs and those designs have been approved by PRASA, the professional team prepares [the] tender document. These tender documents are then handed over to PRASA and also put together their of the tender document. That is what is going to go out to tender. Before we go to tender, recently there has been an inclusion of BSC committee which basically reviews tender documents and approves them for going out to tender, so the review was a spec just with the rest of the tender document and the procurement plan that is been used is appropriate for the work that is been 4:50. That in itself as a process has added to the time that it takes for the project to go out to tender. Your advert would take about 21 days and the tenders would be then closed. Once the tender is closed it then comes up for evaluation. That is probably one of the undefined timelines there, the time that is takes to put together evaluation team. So that process of putting up an evaluation team can take anything between two days or one day up to 14 days. There may be many different reasons leading up to evaluation not taking place as planned. That's one of the more critical areas where there's a slight weakness in the chain of events. Evaluation proceeds depending how complicated the evaluation is, there is no defined time for evaluation understandably there are various levels of projects here, you get your two-billion-rand project including rail turnout, re-signalling, building work and all different elements of railway construction or railway infrastructure. An evaluation like that normally takes longer as opposed to evaluation for refurbishing station building kwa Mnyandu or something like that. That is very specific, its building works it is easier to relate. There's various levels of times that it takes to evaluate a project.

Interviewer: You mentioned something very important where you said there is a time difference on the process between divisional level as well as corporate. Is that time difference clearly stipulated in the process?

P12: These time variations that I'm talking about is not stipulated in the process. What we found difficult is in defining and I think SCM is also quite sceptical in defining in the time that is takes, for once the tender (let us stick to time difference at divisional level) has been adjudicated, awarded, and then is referred to the CEO or the evaluation committee writes up a report submit it for CEO's approval. That

time for the CEO to sign off for that project, it's not defined on as to how much time it takes from having a recommended supplier to actual approval by CEO. That's also a time difference. You do find projects where it takes a day at the right time where the CEO is there and the CEO signs off on it very quickly but you do get time where the CEO is sceptical or wants more information wants further clarity and then those will be delayed. There is no sort of mark down to say tender evaluation reports must be signed in so many days of arrival at the CEO's office or something like that, there is nothing.

Interviewer: Are there any tailor made or customised procurement processes that are there, maybe designed by your office to make sure it assists the project managers to be able to execute their projects smoothly and be able to deliver projects on time?

P12: No, it is the same for everyone, whether you are buying expensive equipment or you [are] going to construction. There is no specific fast tracking mechanism for construction projects that I know of. We have tried, especially with the readiness, we have tried to get infrastructure ready for the new trains. We've tried to twick and pull and do but the process remained relatively the same.

Interviewer: When we started the interview, you agreed that there is a misalignment on the two processes so, why is there no tailor made process to assist if then you acknowledge that there is a misalignment on the two processes?

P12: Let me qualify the misalignment. When you are a project manager and you planning your process you know you will go through these levels or these things for the procurement of the work but the problem is that the times are not defined. It is difficult for a project manager to then schedule and programme those activities. You may have those activities listed but you cannot give a time for them; that is why you find the most linkage are in terms of the programme. And also I would say misalignment is also in view of the fact that for a normal process in PRASA, you [were] just given a project, P12 we want to build a building at Durban station. You do preliminary planning and then from there you need to go through a procurement process again to acquire professional services. The process is relatively the same. That can prolong the duration of the appointment of either professional team or the construction team so there is that misalignment in other places. There are definitely other places where the procurement processes can go quicker but I think here in PRASA you find that to get evaluation team to sit down is sometimes a problem and then the time that it takes to evaluate and then you've got various approval levels where it takes much longer to appoint. Then there is a misalignment there to say if it's a small project it shouldn't be affected with thing because there is a list to be evaluating on where the big the projects you may have a level of understanding that there is a lot of elements that need to be considered.

Interviewer: Do you have all the supply chain committees that are enshrined on the PFMA?

P12: The BSC is enshrined in the PFMA but I think the way it is implemented is not necessarily in accordance or aligned to the status of the PFMA. Here in PRASA one of the problems that I have experienced is the fact that BSC is also comprised of external resources, which would then, would need to be paid for their services and when those resources are not paid, those resources do not sit in the BSC and BSC does not form a quorum to be able to evaluate the, for instance, there have been problems where BSC did not sit for a couple of months. That causes a big problem on project managers who want to put up on their projects to tender but cannot because BSC did not sit.

Interviewer: Do you manage some or all of the procurement processes that you mentioned?

P12: No, EPMO is not involved in any formal way.

Interviewer: Is there a need to improve your organisational procurement processes?

P12: There is definitely a need. There is a standard policy and there are reviews being done but there are processes which are being included in the procurement process, for instance, the one that I mentioned – BSC. The other that I mentioned is that there are probity officers now required to review [the] evaluation report before they are sent to the senior manager for signature. A probity officer is basically an audit firm an external audit firm that will review the process to see if everything is gone right.

Interviewer: So you are saying currently your process is under review?

P12: Not that it is under the review, there is a policy that has just been implemented now. There has been a draft SCM policy that has just come out but there is no clarity whether that has been approved or what is just been implemented. There have been reviews but those reviews have not been implemented so we [are] still working on the 2009 procurement processes. So, I would not know whether to call it under review or the review has been shut but there have been instructions that are implemented like obviously probity officers, BSC inclusion, and audit reviews under internal audit reviews along the process.

Interviewer: What is the reason not to review the SCM policy? Is there maybe a specific reason that you know of for the SCM policy to be reviewed?

P12: From a project implementation side, project managers have complained about exactly what we are talking about is the time that it takes to procure services and the impact that is has on their projects, that is one element. The other element is (I stand to be corrected) but I remember the CPO at one point said look, for an organisation of your size and your nature you actually are allowed by the PFMA to do quotations for a work that is under a million rand whereas the level it can apply here its far below that which means you are forcing smaller projects to go through the full procurement processes whereas you could have used a quotation system.

Interviewer: What is CPO?

P12: Chief Procurement Officer.

Interviewer: What are the project management processes that your organisation is using? Is there a standard project management process that your organisation is using?

P12: No, there isn't one. The suggestion and referral to using PMBOK as a basis of project management as both process and a governance methodology. There are no formal project management processes and procedures that the organisation has approved.

Interviewer: PRASA is such a big organisation and there are such a lot of projects that are costing a lot of money that your organisation is doing. Is there a reason why is there no formal process?

P12: I think it is going to sound like an excuse because it is something that is overdue and may have been an oversight from PRASA. There are attempts to get professional team to come in and develop processes and procedures. I think at least two RFPs which I know will be speaking to development of processes and procedures and automated project management system, not an automated but a least a computerised project management system. And then there is another one - to appoint a panel of professional consultants who would then be selected to assist with project management processes and procedures implementation verification and all sorts that relate to capital.

Interviewer: Do you perhaps have an estimation as to when is this going to happen?

P12: That is the difficult part of it. The one should have happened by now, the panel I do not know when they are going to start because the tender document has been closed and they were going through evaluations, so I don't know where the process is but evaluation is not completed as yet, to be honest. The other one I know the RFP document has been finalised; I am not sure whether it is going through to the BSC and it is definitely not gone out on tender.

Interviewer: Is there at least maybe a project management policy that is guiding?

P12: No. the one that I'm saying is not gone out take care of both, will take care of the policy, processes and procedures. Basically, it will take care of the paper work or the framework of project management and then right down to process of what needs to be done going through.

Interviewer: Your project management processes, are they automated or are they manual?

P12: They are manual. There was a system EPIC, which was mainly going to be used to document and help as a document repository and help to give an overall view of projects in PRASA, but I think it wasn't supported at an executive level. Things that are supported at executive level, they happen. Executives

push for those things to happen and the report of the system is the same. Some of these things fail because let's call it internal politics. That is not the only reason that the system may have failed; it may have failed because also of the actual system not being as user friendly as it could be or the IT network problems that it experienced.

Interviewer: You are saying it is recommended that your standard be PMBOK?

P12: Yes, its recommended that you basically execute your projects in line with PMBOK, the PMBOK knowledge are and the PMBOK process flow.

Interviewer: What challenges that you know of that your organisation is experiencing when it comes to the two processes, which are your project management process and procurement processes?

P12: Let's start with procurement, I think the policy is fairly clear. I think that the policy may not be still working for project managers so, for instance, the appointment of consultants is a challenge and the time that it takes for consultants. In my view, the evaluation should be much shorter and much quicker, so the time that it takes to procure a consultant. No. 2, the contracting of consultants has been an issue of contention with legal services how the draw up their contract. They are not using the industry contract they are using PRASA specific contract, which might be good if the contract it is not make is so that at some point in time in the middle of the project then the professional team's contract expires. The process of design additional requirements are included the projects grows in value and the design takes longer because there is a broader range of consultation that needs to be done to actually get to a proper station that functions as it would be required by operations. You lose a time you get to the end sometimes you don't even get to the time where the contractor has gone tight. Before you even finish the detail design the contract is expired so, the contracting element of it is a problem by stipulating any date there or by stipulating contract expiry date you basically shoot yourself in the foot. The contracts that we use for contractors are not conducive to seeing the project through. Because his contract is expired you cannot pay him, because you cannot pay him he cannot continue. Now you need to destablish and move out of site. The contractor comes back and is going to charge us standing time, re-establishment cost. There's community issues which PRASA needed to deal with before even allowing contractors to come. We've got cash flow problems and those were caused by the contract that we enforced upon him on our word. The second element is the time that it takes for projects to be procured which was discussed fairly in detail I think…. If the evaluation is finished just after board has sat it means you are going to wait two or three months for it to be on the next board approval. That is a solution that needs to be found. And obviously there are inefficiencies or weaknesses in the procurement processes that allow for more time in that. Procurement its time and the contractors the vetting is also a problem sometimes where people after the tender has been awarded then people go through for security vetting which also take its own time sometimes it takes a bit long to go through. The is also an issue in PRASA which is relating to contracting, You awarded this thing has been signed by the CEO and now you busy fidgeting about the contract and the project does not go on to the ground. That's also a killer in terms of time. Those are the elements there that are related to the procurement because contracting and award is very much relating to procurement.

From a project management point of view I think it starts with an HR issue, this is my view there is an HR issue. The organisation tends to appoint technical individuals without clear experience in managing projects and managing big projects. You appoint an engineer; an engineer might be a good engineer but he may not be a project manager. There are engineers who can be good managers but sometimes some of these guys are not suitable for that or they don't have experience in managing and running big projects. I think there needs to be a focus in trying to get more construction engineers construction managers people who are trained in project management and who's got enough experience to do that. You can appoint maybe engineers who made a decision that they want to be project managers and then you need to provide them the necessary training. We normally throw those guys in the deep end and we don't give them training to say OK you've now decided to be a project manager here is a training here is the specification that we want you want to have here is a road map for you to become a professional project manager. From an HR point of view, I think the resources or the project manager there needs to be an improvement in the skill level of the project manager. In short that's what I'm saying.

Interviewer: What is the impact on the organisation now for not meeting the project deadlines, specifically due to those two processes?

P12: It is big because you look at the readiness projects, I think the minister was told that the trains will be deployed in October (2016), they have yet to be deployed; now the set date is March 2017. From a project management point of view I think our projects are always out of the planning and as for implementation its always out of cuter. Planning is quite ambitious and the execution then falls behind. And the second impact which cost increase, every quarter price increase in the construction work. They change not every quarter probably every month but they reviewed every quarter. Those escalation industries change so when project is not implemented within 6 months' prices have had two opportunities to jump. It's a major factor that people don't see. The longer you take to get a project implementation the more expensive it will be. You might find yourself that you will lose more money by delaying a project for an implementation. That's one thing that people are not necessarily aware of but it has a big impact in terms of how much we are spending so basically for the capital programme that we have and not being able to execute less infrastructure because we are taking so long to get projects on the ground.

Interviewer: What is the consequence now that the process owner faces for the delays?

P12: None. I have not seen anybody reprimanded or anything there. There are no consequences.

Interviewer: Why are there no consequences because you are talking about huge amounts here?

P12: It is a difficult one I think because the delays are at on a row they are not attributed lets says inefficient project manager and then you can persecute. How do you persecute the whole SCM department? I think there are different levels of the organisation all the way up to the top even at board level. I think people have sort of away from consequences because they are also involved in the delay themselves.

Interviewer: Is there any forum where now the project managers as well as procurement officials meet in one room where they are deliberately discussing their process problems?

P12: There was and there has been an engagement but unfortunately, I think the engagement that existed have fallen away. There was project management forum that used to be held on quarterly basis. That fell away, especially with the changing management. The changing management has also been a huge distracting factor in terms of the implementing the projects. Some projects have actually standing still because of the change in management.

Interviewer: How can a parastatal organisation like your one be able to align these two processes?

P12: Let's start with contracting, I think a standard industry contract need to be applied in PRASA. That makes it easier for both professional team and contractors out there because they working of the standard contract document I think. There will be unique projects that will need a different strategy but the majority of projects you would have to refer to a standard construction contract. I think that's fairly simple and that's an easy one to solve. Procurement of consultants I think there because the process is fairly constant and settle, I think there should be timelines for approval of those. You need to show time period for those. BSC needs to be an internal thing it needs to sits mandatory. You can swap the people that sit there maybe once every month or once every two months or whatever so that you don't have the same people sitting there and start developing relationships and things but for those people appointed there to need to be a standing commitment to say that on Friday or every second Friday or whenever the time period is that I'm sitting at Bid Specification Committee and I'm evaluating tender documents and specifications so I think that needs to be a standing committee for internal people so that you don't worry about paying people and things like that and I think there's enough intellectual texture internally to be able to do that, that's one of the things. The thing about probity officers, those may sound nice as things to have but they are not necessary. Only specific projects that are required by Treasury here at PRASA to have probity officers involved in the adjudication and those are big projects related to modernisation. You cannot make all projects above 10 million subject to that thing you are going to slow yourself down. I think from a procurement process evaluation committee is also something that needs to be finalised, how do we ensure that the evaluation committee sit whether you want to have standing people for a month then you change them or whatever process that you need to implement.

Interviewer: What is the linkage between the projects that you are executing together with the strategy of the organisation? Are the projects that you are delivering talking to the strategy of the organisation?

P12: Yes the projects are but how part of the strategy is what is missing. You understand what I'm saying?

Interviewer: Can you please explain?

P12: The strategy talks about modernisation, it talks about extension, all those are projects that are being implemented. They relate to replacing all the infrastructure but there is a large number of them that relates to modernisation and upgrading of the factory. The bulk of the rand value in terms of projects relates to modernisation and the strategy of the organisation and where it's going. That element is covered. What is missing is the fact that from saying these are the project that we want to modernise, there is no saying how are we going to ensure that those projects are prioritised in terms of execution in terms of procurement. There is no special dispensation to say, if this project is a modernisation project we need to fast track it like this.

Interviewer: When the project managers are planning their projects, do they plan them together with procurement officials? Is there any alignment in the planning of the projects?

P12: I do not think so but I cannot definitely say no.

Interviewer: Is there any ERP system that your organisation has?

P12: SAP, but the project management of SAP is not exactly what one is looking for. The project management of SAP is more focused on the accounting side of a project, let's put it that way.

Interviewer: So do you have Project Management module activated on your SAP?

P12: No.

Interviewer: In your own understanding, do you think it is possible to integrate on the system side now project management and procurement on SAP system?

P12: That still seen because as I said there is an RFP that is looking to the system to be used. Part of that RFP talks about whatever system that will be implemented must be able to integrate to SAP. What elements of integration are required would be something that is up for debate, but I think in most parts, project managers need to know what have been spent, what budget has been loaded, so things like that. The procurement processes is not mechanised also. The only mechanisation part is when the contract is awarded and it has to be loaded onto the system for payments only. The procurement processes is not mechanised in anyway.

Interviewer: Does your IT infrastructure currently have the capability to make sure that there is this integration? Your IT network, your IT infrastructure?

P12: I do not know. I can't comment other than the fact that we had challenges with the EPIC system and part of that was due to the network infrastructure, so I really cannot comment. I think IT can comment better on if they have gone through those problems.

Interviewer: In your own words, what do you think IT's role can be in making sure that the alignment of the two processes is successful?

P12: I think it would be interesting to see if there was a mechanised procurement processes because that would force people to define date, that would force people to document the process more clearly and define date and obviously it flags the delays and staff like that which then allows for consequences to be applicable because then you know who needed to approve what and why was it standing. I think it would be interesting to have a mechanised procurement processes and the project management too. They were quite involved in developing the RFP, we do need them for those elements that providing the most access and providing ways that project managers could work on and off site efficiently

Interviewer: The RFQ you are talking about is it for Procurement or project management or is it both?

P12: It is for project management.

Interviewer: Thank you very much P12 for your patience and your time in answering the questions.

APPENDIX D13: INTERVIEW WITH PARTICIPANT P13

INTERVIEW WITH P13 (SCM CONSULTANT)

Interviewer: Moring, my name is Pamela Malongwe I am doing research. The aim of the study seeks to explore the misalignment between project management processes and procurement processes. Will you please introduce yourself.

P13: My name is P13. I am an SCM specialist. I joined PRASA [at the] beginning of this year. I am only left with three months to serve my role here at PRASA. I am a contractor in the SCM environment.

Interviewer: As I have already mentioned that my study seeks to explore the misalignment between project management processes and procurement processes in the railway organisation, do you feel or do you believe that in your organisation you've got such a misalignment?

P13: I think what I can say or with the little experience that I have since I joined the organisation is that, yes there is a misalignment when it comes to project management and supply chain management. The reason for the misalignment is that whenever projects needs to be procured, supply chain is not being informed in advance to ensure that it execute whatever the mandate of project management business. So it becomes a problem in ensuring that we as supply chain execute our role in accordance manner according to how we are supposed to.

Interviewer: Can you please tell me briefly, what are the procurement processes that you are using in your organisation?

P13: Can you please specify that question?

Interviewer: You see for instance, project management has a process that has been outlined in PMBOK where you have your project from the beginning, which is your planning until the end of the project. So, do you perhaps at Supply Chain have a detailed process?

P13: Yes, in Supply Chain we do have a detailed process. BSC sits and it goes through the specification of that project it gets approval and then it goes to evaluation went to be evaluated accordingly after advertisement. When the prospective suppliers have responded and once that stage is gone it goes to your bid adjudication committee. It gets adjudicated at that stage and should supplier be appointed or nominated, but remember before the appointment takes place we've got the briefing sessions after the advertisements where we brief all the suppliers in detail as well as compliance to say this is what the project is all about and this is the compliance that will be required from you as suppliers. That is basically our processes.

Interviewer: The same process that you have explained, is it the same process that even the regions and other units are using?

P13: It is supposed to be like that because we also have divisional committees and the regional committees. Here I am elaborating that because this is a corporate office and the processes are being followed. It also depends on the threshold, above 25 million it will be deliberated here and below that, between 10 and 25 million, it will be deliberated at the divisional offices; below that, it will be done at the regional offices. This is the processes that we have in PRASA.

Interviewer: Please tell me what is your understanding in the procurement policy? Do you perhaps have a procurement policy to begin with?

P13: Yha, remember when we come on board we had a policy which we just reviewed and revised and apparently it has now been approved by the chairperson of the board. Yha, we do have a procurement policy which we will be implementing as soon as we get those responses back.

Interviewer: Which one are you currently using, the old or the new one and also, if you don't mind me asking, the old one, is it an amendment of the previous?

P13:

Interviewer: Your procurement policy, is there maybe any procurement policy that is customised or specifically designed to assist project managers to be able to execute their projects or do you only have one process for everything even if you are buying a pen or even if you are doing a construction project?

P13: SCM process should be one process. We do understand that we work in different industries. Your construction industry obviously is different from when you procure your cleaning services because with construction you need to align yourself with your CIDB prescripts. When it comes to procurement, procurement is the same. The only difference is that you apply your national treasury prescripts regulations which is part of our daily processes. I don't foresee any difference when it comes into procuring any goods and services. The bottom line is procurement is procurement and it should follow the same similar process activities.

Interviewer: Have your project managers complained by any chance about your process, if they have what is it that you have done to make sure that the current process accommodates their projects?

P13: I might not know that as I told you that I'm not in operation, I'm here to work on the mandate that I have been ask to which is to review the SCM framework. What I know is, if there is any blockages or if there is any constraints within the procurement processes, that needs to be dealt with accordingly between SCM and the end-user which is the project management office, What I know is, the only challenges that is being experienced by SCM is when it comes to specifications whereby project managers or your end-users client are unable to develop the specifications. So we ask them to say ok come up with the specification which it becomes a problem which it hinders the procurement processes. At the end of the day it's not going to be delivered on time as requested or as needed by you that challenge is still there. This is what holds back the organisation.

Interviewer: The committees that you have mentioned, are they on the PFMA? Your bid specification committees, do you find them on the PFMA?

P13: Yha, we do have that. Those are regulated. The good thing with the committee is that which becomes a problem within PRASA as well is that, whenever committee sits and deliberate on certain project a quorum needs to be formed. Once you find out that there are few members that absent from that sitting this means that ok that committee needs to be postponed the project to the next sitting which is the hold back. Those yes are clearly stipulated in the PFMA.

Interviewer: Do you manage any of the processes or is there any process that you manage?

P13: I am just [a] SCM specialist. I've got a mandate to review the SCM framework and this is the reason I am here. I do not manage people. I only provide advice.

Interviewer: Is there a need, according to your own view, that the current process needs to be reviewed?

P13: Yes, there is a need like what we've been doing we've been looking at procurement processes to see where we can improve to align those processes with policy, to align those processes with directives to align those processes with standard operating procedures to ensure that whatever we do is in line with what we've documented and it's legislated at the same time. So this is what we've been doing.

Interviewer: I understand that you are an SCM specialist but I just want to ask you few questions on project management, for instance, what project management process does your organisation use if I may ask?

P13: I think we need to be clear that your interview is about project management and procurement processes. A smart criteria that your questions need to be specific to my role.

Interviewer: What ERP systems do you have in your organisation like SAP or Oracle?

P13: In PRASA they use SAP. This is what drives their operations. I am not aware of any systems that are in use by the organisation.

Interviewer: Your procurement processes, is it automated, or is it manual?

P13: It's manual. You can say it's not fully automated and it's not fully utilised manually. I think SAP needs to be improved based on the procurement processes that we currently using. Some of the features that are required in the procurement processes are not configured in SAP. Like your contract management is not fully configured because we don't know when the contracts are expiring so we need to monitor that manually. It's a challenge for us but some organisations they can be able to tell you that a contract XYZ will be expiring six months' time on this date on this month. So, you already know by so doing then you can advise your users to say your project is expiring so what we do are we extending it or are we leaving it to expire.

Interviewer: Lastly, do you think it is possible to integrate these two processes in SAP now that you are saying you've got SAP? The project management integrate it with procurement processes?

P13: Yha, I think that can be done but you will [be] required to have the SAP specialist in one office. If Mercedes Benz can do it and its more efficient and effective in their processes why not us? If Metals still in Milpark is able to utilise SAP to its optimal use why can't we do that? If Gautrain I'm not sure what system, they are using but whatever system that they are using it promotes their business this is why they are more efficient, so why not us? So project management and procurement processes can be integrated.

Interviewer: Thank you very much for your time.

APPENDIX D14: INTERVIEW WITH PARTICIPANT P14

INTERVIEW WITH P14 (IT MANAGER)

Interviewer: Good afternoon Mr P14, my name is Pamela. I am doing my Masters at the Cape Peninsula University of Technology. Please allow me to conduct an interview with you. The aim of the study seeks to explore the misalignment between procurement and project management processes in the railway sector in South Africa. Will you please introduce yourself?

P14: I am P14, working for PRASA IT managing the IT EPMO office.

Interviewer: Thank you very much. Like I have already mentioned to you that my study seeks to explore the misalignment between procurement and project management processes, do you think that there is a misalignment between the two processes?

P14: In PRASA, yes, I do think there is.

Interviewer: Ok, so why are you saying that? Can you please elaborate?

P14: I think we all understand and appreciate the processes that are put in place to manage the supply chain environment. You develop a business case, which in our case goes to EPMO for funding. Then yes, that process will take let's say three four months you get the funding approved. Then after that you have got the funding it means you must go out to the market to go and appoint a service provider to come and implement whatever you are doing. That process, I have got projects where it can take up to twelve months in order for you to get to a point where you appoint a service provider. Now, remember if it takes twelve months you did this business case eighteen months back the requirements have changed. You appoint a service provider he comes to try and do what you wanted eighteen months ago while the environment keeps on changing and its happening a lot. If you can look at our projects, most of our projects will have variations and it's because something has changed in between. And really to me it's just those slow processes within.

Interviewer: What are the procurement processes that are being used by your organisation?

P14: I'm not sure in what way, just clarify?

Interviewer: You have your project management process from beginning to end, so are you aware of any process with in the supply chain or procurement processes?

P14: Look, if I understand you well, in PRASA, procurement is the responsibility of SCM department within the end-user departments; we do not do any procurement. What we do, we develop the specification from the user's side from the user departments. After developing that specification, it goes to SCM to initiate the procurement processes. You must have a business case now you develop a specification. The process which is in place now is that there is what it called now the Bid Specification Committee (BSC) where the specification must go to Bid Specification Committee which will consider it they will assess that does not favour any particular vendor then they will ok it. When it's okey'd, it is approved by Bid Specification Committee it becomes where it will go out to the market. Going out to the market depends on the value of the transaction the current policy of PRASA if the value is less than 500 000 you can have sent an RFQ three quotations. But if it's over half a million it has to go out on open tender. That process whether is an RFQ or a tender it's managed by SCM. But if it's an RFQ three quotations then they will actually go through the process. The process is not as stringent as the open tender one where they will get a three quotations select whoever based on the price but if it's a tender then a Bid Evaluation Committee must be created which is an ad hoc committee. They will sit and do the evaluation. After the evaluation it goes to the bid adjudication committee. Now it also depends on value if it's less than ten million it goes to what we call CFSC cross functional team. If it's over ten million it goes to CTPC they recommend they don't necessarily approve they will consider recommend it after approval now if its CFSC less than ten million it goes up to the CPO. The CPO will be the one who will give the final approval on it but if it's over that amount it goes to the CEO or it might go to CFSC which is part of the board. That is how the process around procurement.

Interviewer: As a project manager, are you somewhere involved in this process or you are not involved directly involved?

P14: As I mentioned that the involvement on that process on our side is right at the beginning. You do the presentation at Bid Specification Committee but after that, really we have tenders where even the project manager does not get involved in the evaluation.

Interviewer: Are there any organisational policies that are governing that process?

P14: Yes, there is an SCM policy, which actually governs it. Look, the procurement processes are actually clear. The problem or the challenge around it is that we do not have a, if you say turnaround times, specified.

Interviewer: Is it SCM who needs to make sure that processes are going?

P14: It is SCM Manager. On our side we will do what we have to do by going to put pressure to ensure that you get at least a… if you show your face there you put pressure at least they put yours on top, that actually helps.

Interviewer: Are there any procurement processes that are specifically designed for you as project managers or is it one process for each and everything that you are buying like a pen, is it one process even for projects?

P14: Look, I'm not aware of a different process. I will actually say it's one process in the organisation. I'm not aware of a different process. Currently to me it is the same.

Interviewer: You mentioned that you are involved in the Bid Specification Committee. Do you manage that process?

P14: Bid Specification Committee is the committee of SCM. They setup how often they meet and currently the members are external people the one in corporate. Our involvement is going there to present our specs. You go there and present the spec they will pick up what needs to be changed, advised you accordingly then you change it, do back to the next meeting they will go through it. If they are happy you get an approval. When you have the approval you take the document someone in SCM to say advertise this.

Interviewer: So therefore it means you do not manage any of the SCM processes?

P14: No, I wish I was.

Interviewer: According to you, do you think there is a need to improve your SCM process?

P14: Look, I think I have mentioned that what needs to be improved is not necessarily the process, it's the turnaround. When you draw this process and say Bid Specification Committee, Bid Evaluation Committee, bid adjudication committee, let's have where we say bid specification it will be four weeks, bid evaluation it will be four weeks, adjudication they sit once a month twice a month. I think in the process also put timelines. That will really be the biggest improvement that can be done on that process.

Interviewer: You were saying the only thing that needs to be improved is timelines.

P14: I was saying timelines is the main thing to me that needs to be improved but also on the processes it's not that IT special or what, but we need SCM to have that understanding of some of the things which we buy in the IT space especially our SCM. You need to actually have a team of engineer certified in all technologies which at the end of the day might not have chief for you.

Interviewer: You mean now you need to have IT people in procurement, or you are saying it will be much better to have people who understand IT at procurement?

P14: The first challenge I mention it will be better to have people who understand IT procurement.

Interviewer: What project management processes are you using as an organisation? Is there maybe a customised project management process that your organisation is using?

P14: It's one of the challenges in PRASA at the moment whereby I don't think we have one project management methodology we are using throughout. We do have EPMO, the Enterprise Project Management Office. Their main role is funding. In IT we have got a Project Management office specifically for IT projects. We've got a methodology which we have adopted, it's really based on PMBOK but it's not a pure PMBOK. There is modifications where we modified according to our needs. Understand even the EPMO they were pushing for PMBOK.

Interviewer: What are the policies now that are guiding your current process that you are using? Remember you said there are policies that are guiding the procurement processes.

P14: On our side, the one I am mentioning about PMBOK, it is really just more on methodology on how we must run projects, but we do not have any other policy, which will talk to procurement except using the SCM policy.

Interviewer: You did mention that you do have PMBOK as a standard but you have customised it according to the organisational needs to create your own process.

P14: Yes. It's all about maturity as an organisation to say how much are you because if you take PMBOK out of the book as it is, even mature organisations will need more resources to actually get it implemented. Now you take things which you think really they will be helpful where you are in the maturity lifecycle and it's all about that where you take and modify and say look the bear minimum I need from PMBOK is the following. Then that becomes your methodology as an organisation.

Interviewer: What is the impact on the organisation due to a failure on a project for not meeting its deadline because of the procurement processes for instance? You have mention that there is a problem with timelines where your Bid Specification Committee takes about three to four months then you end up having eighteen months without even having a consultant on board.

P14: I'm not sure if we have systems to quantify at the moment, what I can mention at the moment is, there is a huge negative impact on the organisation where you find out that when you start you start a project which when you do the business case you say this thing will deliver it lets say in six months then from there the benefits are the following. Then you find out that you deliver that with in twelve or twenty four months like it gets awarded after sixteen months and I mentioned earlier on that you will find out that the environment has actually changed, that time, that spec does not necessarily fit; first thing you are going to do now is variation, how do we now change. (2) The other biggest problem we are experiencing here also is we've got a major problem with Opex as PRASA where you find out operational funding is not available you will find out that you can get not necessarily easy but capital funding. Now some times when you start a project when you do even a business case you do not have enough funding for business analysis where you can actually do your business analysis and develop a spec which is 95% correct.

Interviewer: You have mentioned the impact on the organisation, then the question again is what are the consequence on the process owner?

P14: Currently, I have not seen any consequence management.

Interviewer: Why?

P14: It is an area that still needs to be managed from an organisational leadership point of view where, really, if things do not happen, there should be reasons why, and people should actually account, but currently I see less of that.

Interviewer: Is there any forum maybe where project managers as well as procurement officials meet in one room you call it a war room where you guys are deliberately discussing the issues that you guys have on your processes?

P14: Generally, I haven't seen anything like that, but being involved in the readiness project where I actually represent IT I saw something towards that where you'll find out that the aim is to make sure that the new train run, everything is ready when it starts running from a certain date. It was started by the previous CEO. What happens is, it brings different project managers someone from IT, someone from electrical, Perway those who are preparing the depot and it also brings SCM. But look, with all that, the SCM contribution was still not what one has wanted to be. As I say, there was that level of engagement of SCM in that forum where we've got a project, but at the moment, when I go to that meeting you will be surprised to find anyone from SCM. It's lacking but what they've done recently SCM we have to submit our plans at the beginning of the financial year.

Interviewer: So you are saying SCM used to attend those meetings?

P14: Specifically, the readiness ones that's where there was a forum on readiness project it was us and SCM was there where we say now look we are doing all these things unlock it make sure that BSC can sit every week to look at this thing, make sure the CTPC can sit more often because now they can see that if this does not help we are going to go beyond the target day. But as I say I'm still sitting in those meetings and you find out that slowly SCM pulled out and we are on our own.

Interviewer: Do they have a reason why did they pulled out?

P14: It's probably reasons in my head but no specific reason.

Interviewer: What is the program director doing about it because at the end of the day procurement needs to respond to some of the questions that you guys have when it comes to your projects?

P14: It's true, I think maybe we should put it for after the interview.

Interviewer: When we started the interview, you did mention that you that there is a misalignment between the two processes. If now you were to be given a role to head this organisation and look at the two processes and make sure that they are aligned, what is it that you can do to make sure that project management and procurement they work smoothly?

P14: On my side I think it's just more where really it goes back to what you were saying earlier on about consequence management. I think around that to say look if you are put in a position to do some work then just do it. It must be around that because as I say the processes are there they are defined you do this but now if the meeting does not happen and there is no problem it didn't happen. When I go and report I say it didn't sit and that's it. I think it's more around that to say let's hold people to account.

Interviewer: You have an organisational strategy, am I right? What is the linkage with what you are doing to the strategy with the projects that you guys are executing? Is there any linkage between the two?

P14: Yes, there is. When you do the business case, you need to show that linkage otherwise if you don't show it, chances are you don't get the money. Now when you do the business case you actually go to the objectives and actually map what we are doing to the objective like on the revenue side when you do ticketing it talks on objectives on the revenue then you've got service excellent improving systems upgrading, there is a link there is a link.

Interviewer: Do you have any ERP in your organisation?

P14: Yes.

Interviewer: Which one is it?

P14: SAP is the main one. We are still running FMMS and EMPAC but there is still currently a project to move those functions capabilities to SAP.

Interviewer: Your SAP system, does it have a capability to integrate procurement and project management processes?

P14: Yes, it's got the ability. Look SAP it just depends what you want to get out of it. Currently I mentioned that EPMO is using EPIC it's more to me project monitoring or financial monitoring more than anything else. You run an export from SAP to input into EPIC so that when you go to EPIC you can see what invoices have been paid on a particular project. That's how it has been done that is why I say now the usage is very low on that system I don't think it's been done. SAP has got a PPM module if implemented you have that integration right from there which is not implemented.

Interviewer: So the PPM module can be able to integrate the two processes procurement and project management process?

P14: Yes, remember the whole SCM processes are embedded in the SAP. We run a procurement module and we run a SRM module, which are SAP managing the supply chain procure to pay, that part is already running. The projects are running on an external system which as I say EPIC but if we can implement PPM then it's a same system it's like already HR, finance you are the same person in the SAP system.

Interviewer: So it answers my next question now of does our infrastructure currently have a capability to implement that?

P14: Yes, it's got not that we are doing it, not that we have done it. At the moment on the PPM it's not an IT decision it's actually more on the EPMO, decision on the use of PPM. The project portfolio management module is not implemented but if need be it can be implemented.

Interviewer: Which role will IT play in designing the implantation of the collaborated process system on SAP of cause? Which role will IT play in the collaboration of those two processes on SAP?

P14: Our role is IT, we are the middle man. As I said, if finance wants VIP payroll we will advise them, and if they want it, they will have it. In our case, here it's more where we bring that analysis, business analysis skills. What will be the best way of doing it then advising them then getting sign offs if they agree that this is what they want and what output they want to get out of it. Then from there we go to implementation. Implementation yes it's not normally internal IT. You will find out that we will go and find a vendor but when you've got a blue print you know what you are going to give them. I think that's where it will be the analysis then delivery of the solution.

Interviewer: Thank you so much, P14, for your time.

P14: Thank you.