UNIVERSITY OF KWAZULU-NATAL

AN INQUIRY INTO ESKOM TRANSMISSION'S NEW LIFECYCLE MODEL APPLICATION AND ITS IMPACT ON ORGANIZATIONAL EFFECTIVENESS

By

Dudu Promise Hadebe

204523476

A dissertation submitted in partial fulfillment of the requirements for the degree of

Master of Commerce: Leadership Studies

Leadership Centre

Faculty of Management Studies

Supervisor: Prof. Kriben Pillay

Co-Supervisor: Ms Cecile Gerwel

2010

Supervisor's permission to submit for examination

Date: 10 December 2010

Student Name: Dudu Promise Hadebe

Student no.: 204523476

Dissertation Title: An inquiry into Eskom Transmission's new lifecycle model application and its impact on organizational effectiveness

As the candidate's supervisor I agree to the submission of this dissertation for examination.

The above candidate has satisfied the requirements of English language competency.

Name of Supervisors: Prof. Kriben Pillay and Ms Cecile Gerwel

Signature: _____

DECLARATION

I, Dudu Promise Hadebe, declare that

(i)   The research reported in this dissertation/thesis, except where otherwise indicated, is my original research.

(ii)   This dissertation/thesis has not been submitted for any degree or examination at any other university.

(iii)   This dissertation/thesis does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.

(iv)   This dissertation/thesis does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:

       a)   their words have been re-written but the general information attributed to them has been referenced:

       b)   where their exact words have been used, their writing has been placed inside quotation marks, and referenced.

(v)   This dissertation/thesis does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the dissertation/thesis and in the References sections.

Signature:

_____

Dudu Promise Hadebe

complete. It is only through Him that I managed to keep my focus on this very personal work, even during the exciting 2010 Soccer World Cup spectacle.

ABSTRACT

The recent global economic challenges have drastically impacted several economic sectors across the world. As such, Eskom, the South African electricity utility, has experienced a number of changes, ranging from the organisational structure to the functional processes or models, to meet the demands of the volatile global market. This research acknowledges that the Eskom Transmission organisation, a division within Eskom, has interrelated departmental processes. However, the transition from the conceptual phase to the execution (implementation) phase had a number of misalignments. These manifested in the following challenges, amongst others: late execution and completion of projects which often results in cost overruns; poor quality completed projects; a high number of projects at execution stage with inadequately defined scope of work which led to scope changes during implementation; and a high staff turnover, particularly of project managers. As such, the project lifecycle model was adapted to address these challenges. This research focused on the change management principles that were followed in realising the new Eskom Transmission lifecycle model, and investigated the impact that this had on the people "living" with the new model as well as the inter-departmental relations, control mechanisms, attitude towards the management, and organisational performance. Available literature on change management, as well as some aspects of organisational behaviour, such as organisational performance, were utilised to try and provide an understanding of the above-mentioned areas of interest. The chosen and most appropriate methodology for collecting data was the qualitative approach as it allowed for descriptive and extensive information gathering. The researcher sought subjective information through human interpretation. For data collection, a comprehensive questionnaire for all the stakeholder groups was used, as well as documentation analysis. The data was then analysed and interpreted, which allowed for pertinent findings and recommendations to be made. The findings included the establishment that Eskom Transmission adapted Kotter's (1988) eight stage model in implementing its new lifecycle model. The impact of Eskom Transmission's new lifecycle model on the people "living" with this model was found to be premature to measure. However, an improvement has been noted in the definition of the scope of work for projects, possibly owing to more effective interactions between employees during project meetings and is an indication that the new model is a contributor towards improving Eskom's organisational performance. Further findings included inadequate stakeholder consultation, which rendered the followed implementation strategy non-optimal; as well as varied stakeholder views on the support of the new lifecycle model for Eskom Transmission's goals and vision. The latter suggests an opportunity for Eskom Transmission management to review the lifecycle model to improve its alignment to the division's goals and vision in order to encourage commitment levels which, amongst others, impact organisational effectiveness.

TABLE OF CONTENTS

List of Figures

List of Tables

CHAPTER ONE: INTRODUCTION

The introduction outlines the researcher's academic background and explains where the researcher is located within her organisation. It also describes the triggers that have led to the problem question as well as the associated research questions. The motivation for the proposed research is summarised and a clear focus of the proposed study in relation to the business challenges and priorities is outlined. Towards the end of the chapter the objectives of the proposed research are explicitly presented as well as the limitations of the study to be borne in mind throughout this project's development.

1.1   Background

1.1.1   Researcher's Professional Identity

The researcher is an Eskom System Operations and Planning employee with a BSc. degree in heavy current electrical engineering. As a network planning engineer, the researcher's roles are in the analysis and the planning of the power system for the Transmission business in the infrastructural expansion requirements of the network in response to:

- the individual customer connection applications, for example, a farmer requiring energy supply from a nearby substation to his land for agricultural economic activities,
- the need to maintain and improve the reliability of the network, and
- the need to pace generation capacity with load growth.

The power systems planning process is recorded through reports and a business case that comprises the motivation of the project need, its scope of work, costs estimates and presentation for approval by investment committees.

The depth and complexity of the work that the researcher is involved in within the Eskom business makes her feel well-placed within the organisation. In her work environment, the researcher applies nearly all the electrical engineering principles that she learnt at tertiary level. The planning environment also challenges the researcher to be consciously aware of the "social" element that is an integral part of any organisation.

1.1.2   Problem Context

This section briefly summaries the organogram (systems map) of the Eskom organisation and explains the interface between the Eskom divisions when carrying out a network expansion project, for example to build an electricity line for an individual customer.

Figure 1.1 below shows the systems map of the Eskom business.
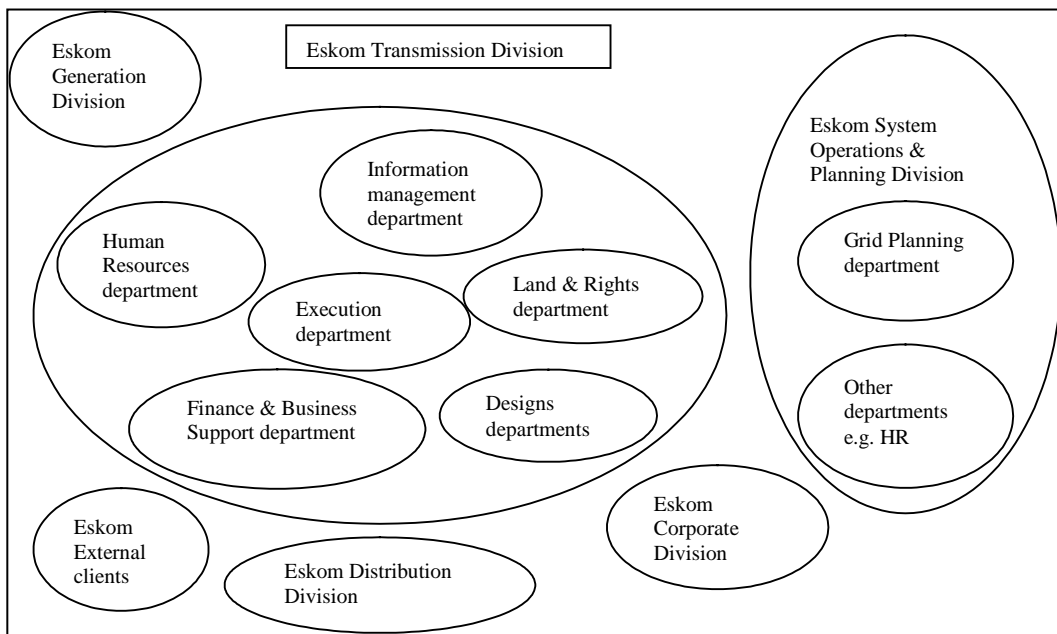
Figure 1.1: Systems map of the Eskom business

It follows from Figure 1.1 above that the Eskom business comprises a number of functional subsets (i.e. departments such as Execution within Eskom Transmission) that are held together by the social interactions (i.e. managers and supervisors who are accountable for the work flow). A network expansion project, depending on its scope and size, is typically initiated by an external client and submitted to Distribution who, where necessary, liaises with System Operations and Planning to execute some of the scope of work. Since System Operations and Planning predominantly does the network planning studies and is not mandated to carry out the on-site execution of projects, the latter need is fulfilled by securing the Transmission services, an Eskom division which, in turn, would either utilise its internal employees or outsource the project execution services to its consultants (referred to as the "Consultants to Transmission" in Chapter 4).   Most of the System Operations and Planning Division work is done internally by its employees and hence there in no reference made to the "Consultants to System

Operations and Planning" later on in Chapter 4 of this thesis.

The researcher's perception of the Eskom Transmission organisational context is that it primarily resembles a "machine" metaphor which is a hard-structured system governed through directives, policies and procedures. However, it also has some organic characteristics to adapt to changes due to its operating in an open environment that is susceptible to unpredictable changes, such as economic, political and social factors.

1.1.3   Process of Problem Identification

The recent global economic challenges have drastically impacted several economic sectors across the world. As such, Eskom, the South African electricity utility, has experienced a number of changes, ranging from the organisational structure to the functional processes or models, to meet the demands of the volatile global market. This research acknowledges that the Eskom Transmission organisation, a division within Eskom, has interrelated departmental processes. However, the transition from the conceptual (planning) phase to the execution (implementation) phase, as briefly described in section 1.1.2 above, had a number of misalignments. These manifested in the following challenges, amongst others: late execution and completion of projects which often results in cost overruns; poor quality completed projects; a high number of projects at execution stage with inadequately defined scope of work which led to scope changes during implementation; and a high staff turnover, particularly of project managers. There was therefore a need to have a common project model that would relate to processes across the Eskom divisions in order to address these challenges, hence the adaptation of the project lifecycle model as already used by one of the Eskom divisions. From the findings of this research, a recommendation is made in Chapter 5 whether to roll-out out the lifecycle model across all of the Eskom divisions.

There are various potential reasons that could be provided to explain the cause of the above-mentioned problems. These could for example include inadequate knowledge transfer from Transmission's consultants, as capacitated by their extensive experience in the project execution environment, to the internal Eskom Transmission employees. Also, there could be a delayed and/ or poorly defined trigger from System Operations and Planning (concept) to Transmission (execution) during the asset creation process, leading to late execution and completion of projects; and scope changes during implementation.

It should be noted that this research did not seek to identify the causes of the above-mentioned problems. Instead, this research investigated the extent to which an organisation's change model and its

implementation within Eskom Transmission yielded results that could justify its use across all of the Eskom divisions, hence "change management" as the premise of this study.

1.2   Motivation for the Research

The triggers for the Eskom Transmission change model as described in section 1.1 above suggest that the Eskom Transmission business could be classified as an open system which is influenced by the external environment. Robbins (1990) argued that in order to keep an organisation in business, such organisation is required to develop internal mechanisms to facilitate planned change. In the context of this research, internal mechanisms refer to the adoption of a documented change model implementation process(es) which, in turn, could be used to establish the effectiveness of the change model through the assessment of its impact on human resources and the organisation's goals and vision. As such, this research sought to understand what the impact of the Eskom Transmission change model was on its users who are "living" with the new model. It also investigated the impact the new model has had on the inter-departmental relations, control mechanisms, attitude towards the management, and organisational performance.

The findings of this research could be used to provide a post-mortem report to the Eskom Transmission management on the lessons learnt during the implementation of the new model within Transmission. The findings of this research will show how the new model will potentially affect the entire Eskom organisation once applied across all the Eskom divisions.

The rationale for conducting this research hinged around the researcher's observation of the Eskom organisational changes, and frequency thereof, in relation to business processes over the past eight years she has been under the organisation's employment. The researcher intended to test the effect of a typical process change on the key elements of a business, namely the people and the goals and vision. The findings of this research are aimed at assisting organisational management to learn about the impact of the lifecycle model change on the overall business and to identify areas of improvement.

1.3   Focus of the Research

The proposed research focussed on the following two issues:
- change management principles that were followed in realising the new Eskom Transmission lifecycle model, and
- the impact of the implemented change on the people "living" with the new model as well as the

inter-divisional relations.

1.4 Problem Statement

Eskom Transmission has recently changed its project model and adapted the "project lifecycle model". During the transition from the old to the new model there has been no assessment of how the change was implemented and of its effectiveness in terms of a range of organisational variables. This research primarily sought to understand whether the principles of change management were applied in implementing the new model within Eskom Transmission as per the change management models in literature as well as Eskom's internal mechanisms for facilitating planned change. In addition, it sought to establish how the change model has impacted the performance of the people who are using it; the relations amongst the Transmission division's employees and management; and Transmission's goals and vision. It is assumed that the three elements that were assessed, namely the procedure followed, the impact on the human resources and the overall impact on the organisation's goals and vision, have a bearing on whether an organisation is effective or not. Therefore, the title of the research was selected to read "An inquiry into Eskom Transmission's new lifecycle model application and its impact on organizational effectiveness".

1.5 Objectives of the Research

The objectives of the proposed research were to:
- Acquire personal knowledge of the available procedure(s) to be followed prior to implementing a model or process change within the Eskom organisation,
- Determine the impact of the followed procedure on the model users, its management and inter-departmental relations,
- Document the lessons learnt during the implementation of the lifecycle model at Eskom Transmission, and
- Add a case study to the scholarly body of knowledge to test adherence to change management principles when implementing organisational model change.

1.6   Research Questions

This research sought to answer five research questions which were informed by the problem statement and the research objectives outlined in sections 1.4 and 1.5 respectively. The five research questions are as described below:

- Is there a change management process that was applied in implementing the new lifecycle model in Eskom Transmission?
- How does change management in the application of the new Eskom Transmission lifecycle model affect people's performance, attitude towards management, control mechanisms and inter-relationships between Transmission's departments?
- How are relations between management, employees and departments affected by the change to the Eskom Transmission lifecycle model?
- How are Eskom Transmission's goals and vision impacted by change management in the application of the new Eskom Transmission lifecycle model?
- How marketable, considering the benefits and risks, is the implementation of Eskom Transmission's new lifecycle model to the rest of the Eskom divisional businesses?

1.7   Limitations of the Study

This research was limited by the following five key constraints:

- *Time*: A time period of approximately six months to conduct and document the research findings.
- *Geographical location*: For the primary research, data was collected from the departments whose employees are based at Megawatt Park. This was a tactical decision to fast-track the research process. For the secondary research, the Eskom change management documentation such as policies and directives available at Eskom Head Office was used to limit the costs of the project.
- *Language barrier*: The researcher's mother tongue is not English and this could be a communication barrier when articulating pertinent research related issues.
- *Interrogated process interface*: Only the Eskom System Operations and Planning process alignment to the new Eskom Transmission lifecycle model was investigated given the stated time constraints.
- *Scope of the topic*: It was discovered as the research progressed that this research was trying to

answer a lot of questions within a limited time period, hence each of the research questions was possibly not adequately interrogated during the fieldwork part of the project.

Notwithstanding the above-mentioned key constraints, the researcher was able to address all five research questions within the set timeline. It was also noted that not all feedback was received from the potential participants during the primary research although the target participants were limited to one area and the majority (22 out of 26) of them responded, allowing for conclusive findings to be made. During consultation with the Eskom change management employees, it emerged that no additional project costs could have been incurred as all Eskom change management documentation is housed within Megawatt Park and the researcher had access to the Eskom printing facilities at no charge. In the interest of time allocation for this research and the required depth of analysis of findings, the researcher limited the study to the alignment test of the Eskom System Operations and Planning process to the new Eskom Transmission lifecycle model as informed by the design of the research questionnaire and the presentation of the results thereof.

1.8   Chapter Summary

This chapter has mapped the researcher in relation to the problem context and provided the motivation for the conducted research. It has also highlighted the focus of the research, the aim of the research and the key research questions to be answered during the course of the study. The last section covered the limitations of the conducted research as it progressed. The next chapter, Chapter 2, provides a detailed summary of the findings of the literature review study.

CHAPTER TWO: LITERATURE REVIEW

The literature review reports on the history of change management, an overview of change management models and methods, and criteria for classifying change. It also covers the generic reasons for resisting change, how culture impacts organisational change and some of the approaches for managing change. An overview of the elements of a performing organisation is given, followed by a brief summary of the impact of constant change on performance. Towards the end of the chapter, the key role players during a change process are briefly reviewed, as well as some of the available models for determining the success factors for a change project prior to conclusion.

2.1   Origins of Change Management

Greener and Hughes (2006) quote Lewin's planned model of change which was developed around the 1950s as the antecedent of change management. Lewin's model comprises three stages: the unfreezing, moving and re-freezing stages. Lewin's work, state Greener and Hughes (2006), signified change management as a formal subject for study and application. The first textbooks explicitly focusing on change management were published in the UK in 1990 and 1992 by Carnal (2003) and Burnes (2004) respectively (Greener and Hughes, 2006).

Greener and Hughes (2006) also acknowledge that since the 1980s, an emergent approach has been identified (or developed) and is favourable to some commentators, following criticisms against Lewin's planned model of change. The emergent approach assumes that change is driven from the organisation's lower hierarchical levels to higher ones as apposed to a "top-down" process. Furthermore, it assumes that change is a process which is continuous and reiterative so as to adapt to changing conditions and circumstances, state Greener and Hughes (2006).

Greener and Hughes (2006) second explanation of where change management originated is that it forms part of organisational development, often abbreviated as OD in literature. Cummings and Worley's (2005:1) definition of OD, as cited by Greener and Hughes (2006: 206), is "a system-wide application and transfer of behavioural science knowledge to the planned development, improvement and reinforcement of the strategies, structures, and processes that lead to organisation effectiveness". Burnes (1996) considers the planned model of change to be central to OD, as interpreted by Greener and Hughes (2006).

However, contrary to Burnes' (1996) view, Greener and Hughes (2006) third description for the surfacing of change management compares it with the traditional OD. The new approach is characterised by the differences with respect to the underlying theory, the analytical framework, the change agent's role and the preferred intervention strategies (Worren, Ruddle and Moore, 1996 cited by Greener and Hughes, 2006). Robbins, Judge, Odendaal and Roodt (2009) explain that OD values human and organisational growth, collaborative and participative processes and the OD change agents downplay concepts such as power, authority, control, conflict and coercion. Furthermore, the OD intervention strategies for bringing about change include diagnosis and team building, amongst others (Robbins *et al*, 2009).

Change management is described by Darby (2010) as a multidimensional concept which is intertwined with eight other primary disciplines, namely organisational change, strategic planning, stakeholder management, leadership, organisational learning, project management, human capital management and performance management. Each of the nine disciplines may be drawn upon when systematic organisational transformation from one state to another is required in order to improve human performance, cites Darby (2010). A brief description of the above-mentioned disciplines is given to articulate the differences between them and in an effort to show how they are interrelated.

Organisational change is about the intricacies of process and infrastructural changes within an organisation, states Darby (2010). The change drivers could be internal (e.g. need for organisational development, strategic forces, ethical issues, etc.) and/or external (e.g. global forces, politics, changes in technology, etc.) and the type of change could either be evolutionary or revolutionary. The proposed organisational change is effected by change agents (or practitioners) who could, for example, be a mix of internal employees and consultants depending on the magnitude of organisational change required.

Strategic planning encompasses a long-term view of how different ideas will influence organisational performance, summarises Darby (2010). At a strategic organisational level the ideas are critically debated by senior management to ensure that the ones implemented are best suited for the organisation's improved performance. Within one of the paradigms, meaningful and acceptable change requires a robust and clear plan for execution of the change, and which has been developed through engaging with the stakeholders at all key stages of the project.

Stakeholder relationship management involves the identification of and clear understanding of the stakeholder groups affected by the proposed change. Effective stakeholder management requires agility to both the realities and perceptions of the stakeholders involved, states Darby (2010).

Leadership refers to the organisation's "guardians" who are, amongst others, responsible for setting the direction for the rest of the employees in terms of the organisation's goals and vision. Emanating from this are the employee's individual job profiles that support the organisation's strategic priorities. In the context of a localised departmental project within an organisation, the appointed project leaders, often called "change agents" assume the leadership role and they could be internal employees and/ or external consultants, often with different contributions into the team vision, e.g. influencing, facilitation and inspirational abilities.

Organisational learning is in literature abbreviated as OL and is described by Robbins *et al* (2009) as being characterised by a flat organisational structure, open communication, teamwork, empowerment, inspired leadership, people and customer orientation, innovation and change, shared vision, amongst others. These characteristics, state Darby (2010), sensitise the affected individuals and groups to what is to be expected in the future as a result of the proposed change. The earlier this is done, the more chances it has of alleviating speculation and worry that could potentially negatively affect day-to-day performance.

Project management is defined by Darby (2010) as referring to the empowerment of change agents with project management skills to support successful relationships between the change drivers. Darby (2010) also states that change, incorporated with project management, ensures "on-time, within scope and cost" achievement of the planned project results.

Darby (2010) argues that *human capital management* involves the need for change managers to be agile to the skills movement pattern within an organisation to ensure that he or she proposes (or addresses) the correct skills and development needs to augment the skills gap that often comes with employee rotation due to the organisational changes.

Darby (2010) states that *performance management* involves understanding performance measurement methodologies as well as the people. Similarly to every person being unique and complex, so are organisations. Therefore improving organisational performance requires the use of multiple methodologies, at the appropriate times throughout the performance management project lifecycle.

For successful *change management* Darby (2010: 38) highlighted that "A good change strategy is not good enough if it isn't supported by those whom it affects" and thereby referring to the importance of

effective communication of any organisational change. This is achieved by engaging the key stakeholders at all the organisation's levels, ranging from senior management to operational employees. Also, this needs to be well planned, done timely and using the right approach. If the organisation is a parastatal, an added requirement is to have the employees' support to secure their sense of ownership, states Darby (2010).

2.2   Overview of Change Management Models and Methods

The literature by Shoham and Perry (2008) has classified five categories of the models and methods for change management in business and public organisational contexts, namely the dynamic stability-, problem solving-, interactive strategic planning-, eight state- and dynamic organisational systems models. These are briefly discussed below.

The *dynamic stability model* is based on the perception that an organisation is a balanced system that operates in an environment that could be unstable, hence destabilising the organisation. The concept for this model is to shift an organisation from an unstable to a stable state, a process which is temporary and which shall bring the organisation to a stable state once completed, state Shoham and Perry (2008). Lewin's 1952 three-stage model of unfreezing, changing and refreezing is an example of a dynamic stability model, quote Shoham and Perry (2008).

In the *problem solving model,* change is considered as a transitory process from a problem phase to a solution phase. If problems are encountered during the problem phase a root cause analysis is done, summarise Shoham and Perry (2008); which, in turn, triggers a carefully planned process to identify goals to address them (fundamental problems).

Shoham and Perry (2008) argue that the *interactive strategic planning change model* is managed using three stages, namely: dissatisfaction, vision and the first step towards change. When interpreted, it is through the dissatisfaction of the current status quo that a vision of the desired future is presented and the first steps towards achieving that vision are taken.

As stated by Shoham and Perry (2008), the *eight stage model* refers to Kotter's 1998 change management model which is a shortened version of stating that there are eight stages from the time of deciding on the change until the completion of the change process. The eight stages, adapted from Shoham and Perry (2008), can be summarised as including the following: commitment building and mobilisation, doing an

impact analysis study, and implementing and anchoring the change.

Burke and Litwin's (1992) model is an example of the *dynamic organisational systems model* which is centred on the transactive systems and transformative systems, state Shoham and Perry (2008). Shoham and Perry (2008) explain that in the transactive systems exchange activities occur and are facilitated through the joining of the components to create an environment that is conducive for change. The interaction of the components with the forces external to the organisation also produces new behaviour(s). The dynamic systems model highlights the complexity of the relationships between the forces in the organisation's environment, the organisation's internal goals for change and the feedback loops between them, summarise Shoham and Perry (2008).

Darby (2010) states that change is multidimensional and therefore requires a holistic approach to manage it. This, she says, necessitates the understanding of the nine primary disciplines described in section 2.1 as well as their interrelationships.

Darby (2010) argues that there is no singular methodology for implementing true change. She emphasises the importance of using multiple methodologies and also the knowledge of the appropriate methods to use at the appropriate time(s).

2.3   Criteria for Classifying Changes

2.3.1   Forces of change

The forces of change are about the key organisational environment factors which create pressure on organisations, and by so doing force the change. These could be classified as internal and external types, arising from financial, political, societal and technological factors. An example from literature which defines the impact of the forces of change is that organisational changes occur within an organisation and under its control, either at its own initiative or in response to an independent stimulus outside the organisation (Shoham and Perry, 2008).

2.3.2   Types of change

According to Chen (2008) there are two types of change, planned and unplanned. He argues that organisations need to plan for change rather than be reactive to it, and by so doing would decrease the

likelihood of being negatively affected by unplanned change. Robbins, Judge, Odendaal and Roodt (2009) and Chen (2008) cite two categories of planned change, namely evolutionary and revolutionary.

Chen (2008) describes evolutionary change as being gradual, incremental and specifically focussed. Its aim is to constantly attempt to incrementally improve intra-organisational processes and strategies to improve their alignment with the changes taking place in the organisation's environment. According to Robbins *et al* (2009) an organisation could, for example, adopt Deming's PDCA (plan, do, check and act) cycles method. Stoddard and Jarvenpaa (1995) cite Leonard-Barton (1988) as saying that this type of change requires the leading role by and participation of the individuals affected by the proposed change. As such, the pace of evolutionary change is adapted to the capabilities of the least changeable organisational element, state Stoddard and Jarvenpaa (1995). Business Process Improvement (BPI) and Total Quality Management (TQM) are two examples of this type of change.

In contrast to evolutionary change, Chen (2008) states that revolutionary change is sudden, drastic and affects the entire organisation. Entirely new systems and processes, objectives and organisational structures are derived, cites Chen (2008) and is supported by Robbins *et al* (2009). Stoddard and Jarvenpaa (1995) mention that in the terminology of radical change theorists that revolutionary change constitutes a "deep structure or paradigm shift" change which is often preceded by some level of disorder or ambiguity. Business Process Reengineering (BPR), restructuring and innovation are some of the examples of revolutionary change.

Stoddard and Jarvenpaa (1995) explain that within planned change there are two dimensions to consider. The first one is that the outcome of change can be described in terms of scope which refers to the degree to which the proposed change spans across the organisational boundaries. For example, proposed change could be limited to within a functional unit or impact across all the organisational divisions.

The second dimension is the depth of change which involves the nature of change. Stoddard and Jarvenpaa (1995) cite Orlikowski (1993) who argues that this is dependent on the strategic goals and the context of change. In the context of this research, the strategic goals could, for example, refer to the desired pace of change or improvements in efficiencies, whereas the context of change refers to the specific location of the proposed change, for example a business unit.

Shoham and Perry (2008) distinguish between changes of first and second degree. They explain that first degree changes are those within the extant thought mindset and second degree types are changes of the

thought pattern. Shoham and Perry (2008) state that their definition aligns with that of Kuhn (1970) which relates to changes in the basic assumptions (similar to the extant pattern of thought) and to changes that have shaped the basic assumptions.

Levy (2000), as cited by Shoham and Perry (2008), differentiates between internal and external-, as well as between forced and initiated types of change.

The forced and initiated types of change is supported by Liuhto (1999a), as quoted by Alas and Vadi (2004), who differentiate between proactive and reactive types of change. This is based on a study on the Estonian environment-organisation relationship where it was argued that the change strategies and the types of change differ in stable and unstable environments. Liuhto (1999a), according to Alas and Vadi (2004), found that in the earlier turbulent environment, managers reacted to change and post-2005 the direct opposite was noted as the situation stabilised. However, Alas and Vadi's (2004) finding differs from Liuhto's as they found that in established but uncertain economies, managers tend to predict events and act more proactively compared to their counterparts in more stable environments.

2.3.3   Targets of change

Chen (2008) argues that when change is planned, it aims to primarily improve performance at four key levels as discussed below.

The first level is the *human resources* which is argued by various authors, including Chen (2008), as being the most important asset of any organisation. Human resources is a form of competitive advantage as the skills and abilities of an organisation's employees distinctly define the organisation. Therefore, organisational structures should support the acquisition and use of human resources skills.

For *functional resources,* the second level, Chen (2008) states that organisational functions or units within organisations should have measures for managing the environment they operate in. During organisational change most organisations transfer resources to the units where they could be utilised better. The resources transfer could be improved by making changes to the organisational structure, culture and technology. A re-structuring example could be a change from a functional to a product team make-up to accelerate the development process of a product.

Technological capabilities form a third level and capacitate organisations to change themselves in order

to capitalise on market opportunities, cites Chen (2008). This could, for example, include improvement in the production of a product to increase their quality and reliability.

O*rganisational capabilities* is the fourth and last level and refers to the organisation's ability to harness its human and functional resources by designing the organisational structures and culture. Organisational change usually entails changing people- and functional interrelationships to enhance the organisation's viability for continued existence, states Chen (2008).

2.4   Why Organisations generally Resist Change

According to Craine (2007), resisting change is natural, emotional and inevitable. He explains that this is so because people like familiarity and comfort, yet change affects people's ability to feel comfortable, capable and confident as it requires that they learn new systems, develop new work patterns and accept new responsibilities. Leemann (2010) argues that what often appears as resistance to change is actually a misinterpretation of lack of clarity. His research has documented that the most difficult challenge facing the EHS (environmental safety and health) professionals is to be tasked to lead and implement change in their organisations. This could perhaps be explained using Craine's (2000) "change cycle" which is a four-step cycle of emotions that people will probably experience when faced with change as illustrated in Figure 2.1. The four sequential zones of the change cycle are the Comfort, the "No", the Chasm and the "Go" zones.

The Comfort Zone

Confidence
Control
Competence
Complacency
Boredom

The "Go" Zone

Acceptance
Excitement
Clarity
Creative
Tension
ImplementationS

The Change Cycle

Shock
Denial
Anger
Resentment
Frustration
Sabotage

The "No" Zone

Bargaining
Depression
Anxiety
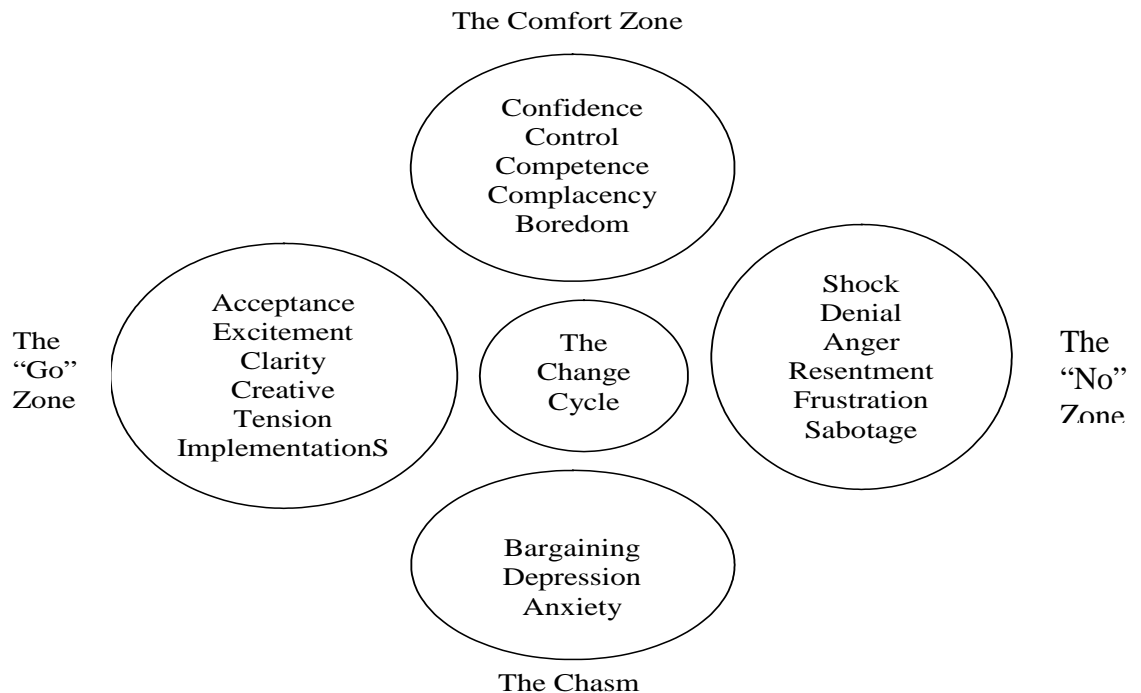
The Chasm

Figure 2.1: The Change Cycle (Craine, 2007: 45)

15

Craine (2007) describes the comfort zone as one where people emotionally reside prior to dramatic change taking place and is characterised by happy emotions and general comfort with the status quo. On the other hand, the "No" zone is signified by emotions of shock, followed by denial reactions, and then anger when people no longer can deny the inevitable and finally resent the situation or become frustrated and even resort to sabotage tactics. Craine (2007) describes the "No" zone as an emotional phase, which is difficult and delicate for all the affected people. According to Coetsee's (1999) description, this stage is characterised by passive-, active- and aggressive forms of resistance to change and finally apathy (indifference) when the individuals affected by change know about the change but their perceptions and attitudes regarding the change intervention are neutral, thereby signifying a passive form of "resignation" and representing a transition between resistance (rejection) and acceptance.

The people in the chasm zone are described by Craine (2007) as being in the "gap" and links up well with the interpretation of Coetsee's (1999) description above, as the affected individuals are not necessarily resisting the change but are not committed to supporting it either. This, states Craine (2007), represents an opportunity for them to be moved to the acceptance phase to help take them out of depression and anxiety due to the looming uncertainty as they do not know how the proposed change will personally affect them, and to avoid resorting to bargaining tactics in order to revert to the comfort zone.

In the fourth and last zone, the "Go" zone, people are ready to embrace and implement the proposed change, show feelings of excitement, and have a certain degree of clarity about their new roles and the expectations during the change, summarises Craine (2007). Coetsee (1999) further states that in the acceptance of change stage the affected individuals show support for the proposed intervention (without necessarily doing anything actively) and are involved as shown by willing co-operation and participative behaviour.

According to Bovey and Hede (2001) as cited by Kwahk and Kim (2008), resistance to change generally manifests itself as opposition, ignoring, undermining and refraining which reflect congruence to some of the change cycle behavioural characteristics as identified by Craine (2007) and Coetsee (1999). Below is a discussion on the contributing factors leading to resistance to change.

2.4.1   *Unwillingness to try something new*

Leemann (2010) argues that close familiarity with routine work habits leads to people generally

responding reactively to change rather than proactively (anticipatory). In his study, Leemann (2010) found that where safety is concerned it is far easier to be reactive than to propose a new approach. In his work he cites Kuhn (1970) inferring that there needs to be a paradigm shift in order for change to occur. Leemann (2010) states that the shift in paradigm occurs once sufficient data has built up over time and reached a tipping point. An example of this is when people let go of their previous way of doing things and embrace a new way. Leemann (2010) highlights that most change ideas fail at the launching phase. Leemann (2010) cites Chip Heath and Dan Heath (2010) who have arguably discovered a methodology of effecting a safety paradigm shift based on Haidt's (2006) metaphor of a rider perched on an elephant. The Heath brothers argue that in Haidt's metaphor, the elephant represents people's emotional side and the rider the rational side. They further mention that when the elephant and the rider differ on the course to take, the elephant would win. Leemann (2010) bases his three steps to achieving a paradigm shift on the Heath brothers' rider-elephant metaphor as follows:

Direct the rider: he promotes correct practices which are prescriptive regards the destination and the benefits thereof.

Motivate the elephant: he explains that knowing something, without feeling it, is not enough to cause the desired change. Also, it is imperative to break the change into smaller chunks to avoid overwhelming the elephant and to focus on smaller groups or work teams at a time rather than the entire organisation at once. Motivation of people is also important to promote a sense of identity and to instil a growth mindset.

Shape the path: The need to "tweak" the environment to suit the situation cannot be overlooked. This is to avoid the natural change to people's behaviour when the situation changes. Consistency in behaviour is also critical so that the rider will not be exhausted. Lastly, the new desired behaviour should be spread throughout the organisation.

2.4.2 *Poor planning or lack thereof*

Brooks (2010) mentions that successful change management starts with a plan. Rash (2010) agrees with him when quoting that an understanding of how change works in an organisation as well as deciding how to translate that into a formal process are the biggest factors in implementing change management. According to Rash (2010) the following three steps are important in the process of implementing change:

- *First step: Decide what is meant by change,*
- *Second step: Articulate what needs to be changed, and*
- *Third step: Clearly spell out the change process.*

Rash (2010) argues that if change management is poor or lacking, this could result in loss of potential

business and, even worse, get an organisation out of business. He documents that the biggest single factor is understanding how change works in one's organisation and deciding how that should translate into a formal change management process.

Rash (2010) further argues that in some organisations this could require a cultural shift, whereby the norm would be to adopt a "fighting fires and overcoming disasters" approach instead of having a proper plan in place. He also highlights that in the context of an IT environment it is essential to know the change process well and to immediately measure the results of the change process prior to rolling out the change throughout the organisation. He also gives an example of adopting international standards to help spread the change across the organisation.

Melancon (2007) agrees with Rash (2010) when stating that having the measurement processes in place is just as important as having the change management policies and processes. According to Melancon (2007), by implementing change audit and control mechanisms that are supported firstly from the organisational leadership, organisations can accelerate their responses to undesired and unauthorised change, and simultaneously deploy planned and desired changes.

2.4.3   Poor organisational ownership of the issue

Rash (2010) argues that the success of organisational change management interventions depends on the change agents' level of authority to enforce the change. Encompassed in this, Donnell as cited by Rash (2010), is the need to engage all the stakeholders to get their support to accomplish successful implementation of the proposed change management system. According to Melancon (2007), this is achieved by first securing the support of the organisational leadership. Rash (2010) mentions that lack of commitment to change and a poorly articulated process renders the change management intervention useless. To add to Rash's (2010) argument, Coetsee (1999) establishes a direct polarity between commitment and effective resistance to change and the existence of a continuum between the two factors. Coetsee (1999) states that one without the other renders the entire change intervention unsuccessful even if it is well planned and executed. Coetsee (1999) describes commitment as long-term enthusiasm, ownership of, identification with and internalisation of an intervention.

2.4.4   Mismatch between capability and goal

Eaton (2010) argues that change management initiatives are often unsuccessful due to a gap between what

organisations have a capacity of doing and what they should do as per the specification from the customers. Examples could include a balance between the processes and the desired product quality, the level of customer service and the employees' behaviour.

2.5   Organisational Culture with respect to Change Management

Organisational culture is about the expected attitudes, values and behaviours for a particular organisation (Alas and Vadi, 2004). They further quote Sathe and Davidson (2000) as stating that organisational culture often requires a change in people's mindsets. Baker (2009), as will be shown in section 2.9.3, concurs with Sathe and Davidson (2010), as quoted by Alas and Vadi (2004), by stating that changing the employee-employer mindset is a precondition for changing behaviour. Alas and Vadi (2004) also make a correlation between attitude and behaviour by arguing that attitude informs behaviour. In the context of organisational change, the challenge is to get the majority of stakeholders to have the same attitude. Alas and Vadi (2004) make an example of participation as a way of achieving this (adopted from Coch and French theorists, 1948). Alas and Vadi (2004) argue that change requires learning new skills, behaviours and attitudes. As such, organisational commitment, job satisfaction and attitude strength, which is a measure of how a certain attitude synchronises with one's own deeply held rational and political values, are some of the prerequisites for extended employment with an organisation.

Lok, Westwood and Crawford (2005) definition of organisational commitment aligns with Alas and Vadi's (2004) argument that organisational commitment is a subset of organisational culture. Lok *et al* (2005) define organisational commitment as being about how employees perceive their relationship with an organisation and how they then develop attitudes based on that. Lok *et al* (2005) also point out that organisational commitment is widely regarded as being primarily affective or attitudinal and does not have a behavioural component.

Robbins *et al* (2009) interpret organisational culture as the employees' perception of the characteristics of an organisation's culture, thereby contradicting Alas and Vadi (2004). Robbins *et al* (2009) also highlight that there could be subcultures within any given culture and are echoed by Lok *et al* (2005).

Lok *et al* (2005) state that subculture is often a neglected variable. In their research they found that innovative and supportive subcultures have a positive relationship with organisational commitment while bureaucratic subcultures have a negative relationship. Lok *et al* (2005) disagree with a postulation by Deal and Kennedy (1982); Peters and Waterman (1982); van Vianen (2000); O'Reilly, Chatman, and

Caldwell (1991) of culture being the main contributor to organisational commitment as it contradicts Lok *et al* (2005) and Alas and Vadi's (2004) argument that commitment is a subset of culture, and not the other way around. Instead, Lok *et al* (2005) argue that it is the perceived subcultures which have a stronger relationship with organisational commitment as they provide a more significant, personal, and informal reference point. Lok *et al* (2005) argue that organisational culture as a construct is useful for inter-organisational studies but has shortfalls when attempting to understand people's intra-organisational behaviour. Lok *et al* (2005) quote Brown (1995); Martin (1992); Trice and Beyer (1993) as stating that this is due to the subcultures which develop around organisational groups based on factors such as location, functional focus and professional background (Bloor & Dawson, 1994). Eaton (2010) reinforces the argument of existence of subcultures within organisations when stating that within an organisation there is no single "uniform environment" (or culture, in this context). Instead, subcultures differ amongst the teams. Hence his conclusion that the organisational environment is complex as it results from a combination of many micro-environments (relationships between individuals), team environments and sub-division environments.

2.6   Approaches to Managing Organisational Change

2.6.1   Organisational readiness for change

Kwahk and Kim (2010) single out readiness for change as the prominent factor in contributing to the effectiveness of the proposed organisational change. The authors state that the employees' attitude towards the change is a mirror image of the organisation's level of readiness for change. According to Armenakis, Harris, and Mossholder (1993), as cited by Kwahk and Kim (2010), readiness is the cognitive antecedent to whether the employees' behaviour will support or resist the proposed organisational change.

Kwahk and Kim (2010) cite organisational commitment, perceived personal competence, performance expectancy and effort expectancy as the four requirements for achieving organisational change readiness. They also argue that organisations that have created readiness for change often reduce the employees' potential resistance to the proposed change.

Kwahk and Kim (2010) cite Mowday, Porter and Steers (1981: 80) description of organisational commitment as "the relative strength of an individual's identification with and the involvement in a particular organisation". Perceived personal competence is the degree of an individual's feeling of competence in a job (Allen and Meyer 1990 as cited by Kwahk and Kim 2010). Performance expectancy

means the degree to which an individual believes in the use of the new system to help one to improve in job performance (Venkatesh, Morris, Davis, and Davis, 2003 as cited by Kwahk and Kim 2010). Venkatesh *et al* (2003) as cited by Kwahk and Kim (2010) describes effort expectancy as the degree of ease of using a newly implemented system. The first two requirements (organisational commitment and perceived personal competence) are more relevant to the individuals (employees) and the last two (performance expectancy and effort expectancy) to the new system to be adopted by the organisation's employees.

Eaton (2010) echoes Kwahk and Kim's (2010) arguments above when stating that organisations with the correct environment (or culture, in this context) have motivated employees who, in turn, positively impact the organisation's outputs or performance.

Eaton (2010) further argues that what contributes to the inertia in changing the organisational environment is, amongst others, the individual employee's beliefs and assumptions that have been engraved within organisations over a long period of time, which are manifest through management's behaviours and actions which support the prevailing status quo. He also states that the leaders at all levels have an impact on their "local" environment. An effective leader will positively affect the performance at his or her local level and vice versa.

Eaton (2010) cites Roberto and Levesque (2005) as stating that effective change is preceded by addressing the procedural and behavioural changes way before the proposed improvement (organisational environment) is initiated. Leaders, states Eaton (2010), often have some desired organisational environment but often fail to, in fact, have it because every enterprise is in fact four organisations; the one written down, the one believed exists, the one that people wish existed and the one needed (unnamed author as cited by Eaton, 2010). He further says that the correct organisational environment will depend on the stakeholders' needs and the level and type of competition faced by that particular organisation. Leaders may need to do a gap analysis between the existing and the desired environment to ensure long-term organisational success. Where a gap exists, the challenge for the leaders is to manage it as it will affect performance.

2.6.2   *Strategies during the planning cycle of change management*

According to Wright (2010) there are three strategies that could be adopted during the planning cycle of organisational change and are described below.

The first strategy is the *rational-empirical strategy* which is founded on the belief that people act on the basis of reason when new information arises. However, most often, behaviour is influenced by a host of issues and not only limited to the rational component of the situation.

The second type, the *power-coercive strategy*, is based on the "top-down" approach whereby instructions come from the leadership and are disseminated down the organisational hierarchy.

The third approach, the *normative-re-educative strategy*, is inclusive of the individuals who will be affected by the proposed change and allows for open communication channels and agreed norms of behaviour.

The type of strategy that is best suited to a proposed change is dependent on an array of issues which include, amongst others, what needs to be changed, the reason for change, the project's timeframe and location, and how outcomes will be communicated and evaluated. An example is Baker's (2009) model, as discussed later on in section 2.9.3, which the researcher identified not to be applicable in an organisation which uses the power-coercive strategy to implement change although Baker's (2009) model would fit a normative-re-educative organisational environment.

2.6.3   Potential obstacles during implementation

Eaton (2010: 56-57) summarises the operational problems during implementation into the five categories, namely getting support from all the stakeholders, "managers leaving it to those higher up to explain the rationale for change", being detail orientated rather than the purpose", failure to anticipate the problems and opposing forces, and misaligned words and action. These are explained below.

Getting support from all the stakeholders: It is expected that not everyone will have a "buy-in" at the start of the project and the aim should be to get the majority of the stakeholders to support it. Trying to get everyone's approval could be unrealistic and further delay the change project.
Managers not taking accountability to explain the rationale for the change: This refers to the middle managers inability to "sell" the change idea to the individuals impacted and possibly acting contradictory to the vision of the senior management.
Being detail orientated rather than the purpose: This refers to the micro-management of the change process as opposed to focussing on the "bigger picture" to ensure that the process is adequately flexible to

adapt to changes in the external environment.

Failure to anticipate the problems and opposing forces: This refers to a lack of plan for dealing with the worst that could happen during the change process, e.g. "pulling out" of key employees.

Words and action not in alignment: This refers to the importance of the "walk the talk" by senior management.

2.7   Organisational Performance

Robbins *et al* (2009) define an effective organisation as one where outputs reflect improved work quality and where employees work better. This does not necessarily imply that an organisation is at the same time efficient, which is the case in the context where employees work faster and often at a measurably lower cost (Robbins *et al*, 2009). For the purposes of this research it is assumed that an organisation which is at least effective is a "performing" organisation.

Rieley and Clarkson's (2001) definition of organisational performance is centred on the systems thinking iceberg model as illustrated in Figure 2.2 below.
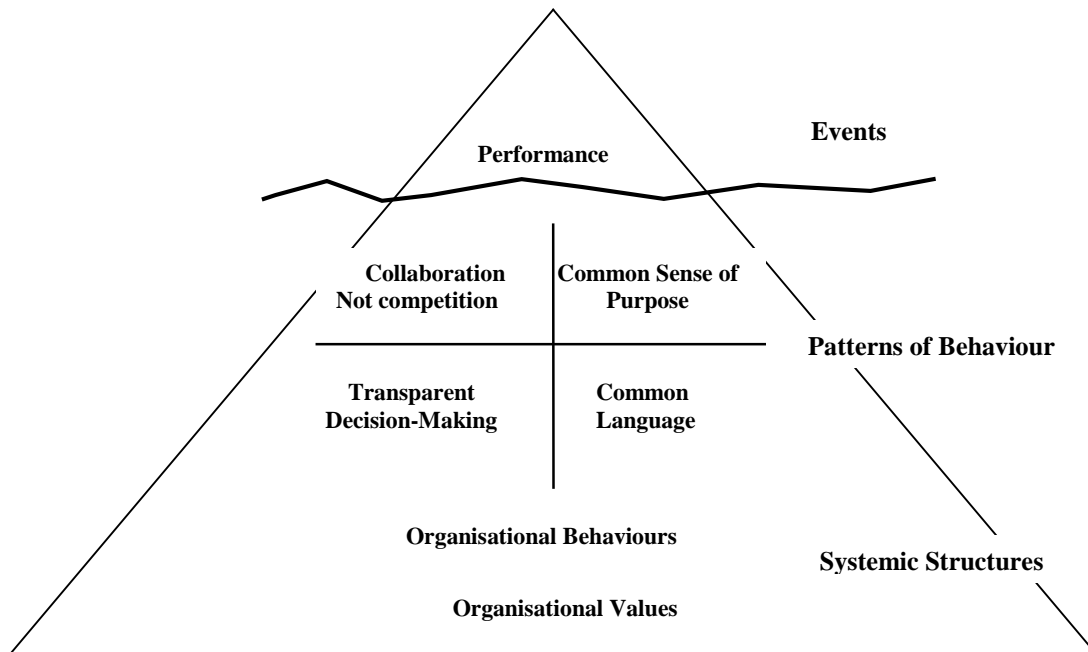
Figure 2.2: Systems Thinking Iceberg Model (adopted from Rieley and Clarkson, 2001: 170)

Rieley and Clarkson's (2001) performance model suggests that there are four interrelated factors, namely

the principles, the organisational structure, the behaviour and the outcome, which ultimately affect organisational performance as described below.

The *principles* are the values that describe the way in which an organisation should work and include locally based guiding elements that are undeniable and irreducible; by the employees themselves, particularly those who have been with the organisation for a long period of time and have statistical historical information about the organisation's behaviour (meaning to follow shortly). The second factor, *organisational organogram*, refers to the level of coherence attached to the decision-making pattern. *Behaviour* is how the principles will be acted out by the employees while *outcome (or performance)* represents the results of the principles as acted out through employees' behaviour (Rieley & Clarkson, 2001).

Figure 2.2 above also shows that performance represents a small portion of the entire organisational dynamics that affect it and these are not necessarily "obvious" as illustrated by the majority of the factors being "under the iceberg". Organisational values and shared vision are some of the concepts which influence organisational behavioural patterns which, in turn, impact organisational performance. To understand the events requires, amongst others, a thorough comprehension of the concepts which support the exhibited behaviours.

This is supported by Maier and Finger (2001) who did a research project to understand the constraints to organisational change process in the food industry context and found results that were aligned with Pettigrew (1987) and Schneidewind's (1998) argument that to sufficiently understand the constraints to learning and organisational change, there needs to be consideration of the interaction between the cognitive, power and resources dimensions.

Rieley and Clarkson (2001) argue that organisations could be categorised into three distinct sets of people when undergoing change:

- *The "not willing"*: those who are opposing the change initiative,
- *The "not able"*: individuals who are not skilled to deliver the required tasks, and
- *The "not knowing"*: those who do not know what to do to address the reasons for change or do not understand the rationale for change.

In a highly effective organisation the "not willing" group should form a minority, with the "not able" and "not knowing" groups forming the larger part of the population, emphasise Rieley and Clarkson (2001).

Rieley and Clarkson (2001) quote the "outcome thinking" methodology of improving organisational effectiveness which suggests the need to "start with the end in mind". They argue that this should improve performance in business organisations, and the use of performance as a reference point provides a context for all organisational activities. Rieley and Clarkson (2001) base their formula for calculating performance on Figure 2.2, which is Performance = Values + Focus on Behaviours x Patterns of Behaviour. Rieley and Clarkson's (2001) performance formula is premised on two variables; the values and behaviour. The researcher deduces from Rieley and Clarkson's (2001) performance formula that for best performance, the values (refer to definition of "principles" in section 2.7 for meaning) should be well articulated else behaviour could be negative or an understanding of the values could be used to correct undesirable behaviour. The researcher is of the opinion that Rieley and Clarkson's (2001) performance formula is not a pure mathematical formula where the two variables are simply added together but serves as a guide for inputs when calculating organisational performance. Rieley and Clarkson's (2001) formula provides a comprehensive understanding of the factors that impact performance when read in conjunction with the seven organisational conditions which affect behaviour as described by Rusaw (2009) below.

Rusaw (2009) argues that employee behaviour (as per Rieley and Clarkson's 2001 definition) is influenced by the seven organisational conditions which, amongst others, include interpersonal supervisory trust and resource sufficiency as described below.

Interpersonal supervisory trust emphasizes the employee-employer psychological and relational contracts (Yukl 1989; Ronza 2009). Rusaw (2009) also cites Kopelman, Brief and Guzzo (1990) argument that when trust is high, employees will voluntarily go an extra mile to achieve superior results.

Rusaw (2009) describes o*rganisation climate* as the perceived degree of "warmth" and "coolness" of the workplace and is influenced by the employee-supervisor relationship. She further cites Kopelman, Brief and Guzzo's (1990) statement on the climate resulting primarily from how supervisors communicate the goals, standards, methods and procedures.

According to Rusaw (2009) the core values and beliefs that are shared by the employees and managers throughout an organisation generally constitute o*rganisational culture*. She cites Denison (1990) as stating that culture provides models and guidelines for proper behaviour, problem solving, interpersonal relationships, and basis for action.

Organisational politics refers to an individual's or group of individuals' use of power and influence (persuasive tactics) to create situations where one side wins at the other's cost (Mintzberg, 1983 as quoted by Rusaw, 2009). Organisational politics influence the perception of fairness of work structure and rewards and ultimately "leaves marks" on an organisation's climate and culture (Ferris, Fodor, Chachere and Pondy, 1989 as cited by Rusaw, 2009).

Rusaw (2009) argues that *job content and structure* influence the employees' perception of an organisation. The skills requirements to perform the tasks are, amongst others, part and parcel of this. She states that the main task of management is to match employee skills with work that will provide adequate challenge to meet an employee's psychological and interpersonal needs, provide development opportunities while allowing for meeting organisational targets. She also cites Levine (1995) as arguing that if there is a measure of job security, it adds to the effort put in by employees which, in turn, affect the results.

Rusaw's (2009) view on *flexibility of implementation* relates to the ease of introducing and managing new ideas and new systems which also influence work effectiveness. Rusaw (2009) argues that in the case of implementing new systems, there should be user flexibility in the form of clearly written goals and unrestricted liberty in executing them. She also highlights the importance of policies that create clear guidelines for use in practical situations. She also cites Ferris, Fodor, Chachere and Pondy, 1989 as stating that flexible systems easily adapt to change, decentralise authority and foster an open culture, which allows for feedback from individuals directly affected by the change.

Rusaw's (2010) definition of *resource sufficiency* aligns with Eaton's (2010) description of tangible- and intangible assets, and human resources which are required for planning and implementing change within an organisation.

At an organisation level, Rieley and Clarkson (2001) summarise the inhibitors for achieving the desired organisational performance into the following four categories: *failure to compete in the market, the level of an organisation's effectiveness, ability to procure adequate resources, and perceived ability for strategic planning.* Each of these four factors could be reality-based or perceived.

2.8   The Impact of Constant Change on Performance

Rieley and Clarkson (2001) state that the constant movement of employees within and out of the

organisations as a result of re-structuring could result in relative chaos which destabilises the organisation and, consequently, reduces its effectiveness. In short, they are alluding to a statement that reduced employee movement results in a more effective organisation and vice versa, as illustrated by Figure 2.3 below.
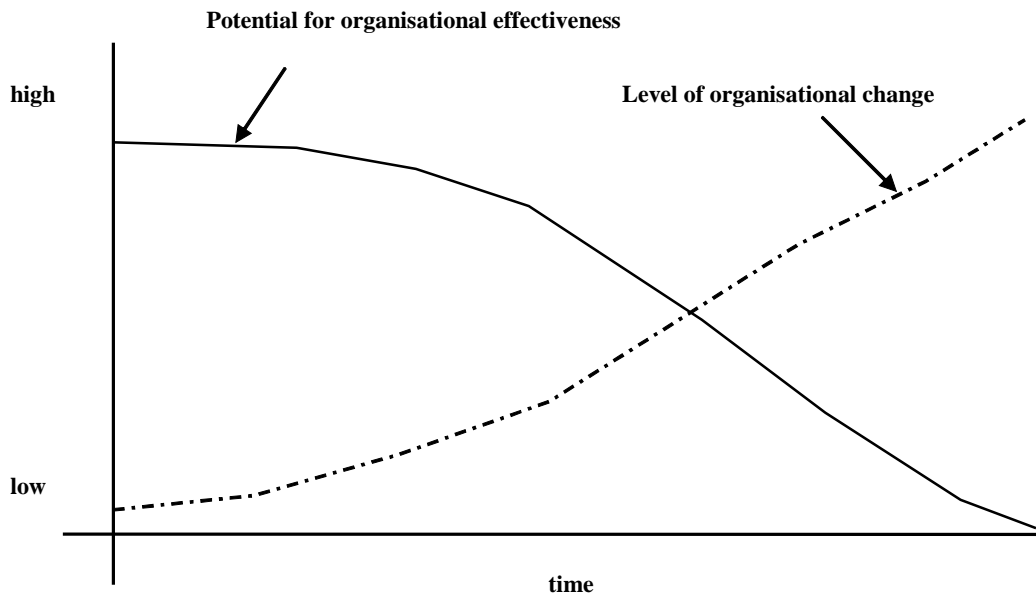
Figure 2.3: Change versus Effectiveness Relationship (Rieley and Clarkson, 2001: 161)

Rieley and Clarkson (2001) state that today's organisations are faced with two key frustrations, firstly that performance levels are not meeting the targets and, secondly, the perception that change seems to be constant and, as such, that employees seem to be misaligned with the vision. They argue that when the two key frustrations converge through simultaneous low performance levels and evidence of employees' misalignment to the vision, most organisations restructure in an effort to become more effective. However, their observation in organisations that do restructure at this point is that there are minimal long-term improvements in effectiveness. They argue that this could be due to either insufficient time to measure the output or the short-term focus of the efforts, which may imply that organisational change is happening too frequently. They also highlight the increasing levels of stress among the people affected by the change in continuously restructuring organisations.

They also state that how an organisation perceives itself, has a direct relationship with its capability to determine its current reality. They state that if perceptions do not match the reality, a number of dynamics commence, such as negative thoughts which affect employee behaviour and, in turn, organisational

performance in the short and long-term. Organisations should therefore take adequate time to properly plan a change intervention rather than to be reactive to a decline in performance results as any change could affect a host of variables such as human resources which, in turn, impact organisational performance in the short and long-term.

It should be noted that Rieley and Clarkson's (2001) model considers the frequency of change as the only variable that impacts organisational performance but there could be other variables such as skills levels of the employees. The model discourages constant organisational change for organisational effectiveness. The researcher concurs by arguing that with constant change comes, amongst others, potential loss of employee trust in sustainability of the brand and loss of learning from past mistakes which, in turn, negatively affect organisational performance.

Liu and Batt (2010) concur with Rieley and Clarkson (2001) when arguing that less frequent process changes improve employee performance.

2.9   The Role of Key Organisational Players during a Change Process

2.9.1   The leader's role

According to Bridges and Mitchell (2000), change is nothing new to leaders and they understand that organisations cannot simply "be managed" without end. If so, the practices of the past would be replicated whereas in reality the business conditions are, to a large scale, ever-changing and thereby rendering the past assumptions and practices invalid.

Bridges and Mitchell (2000) warn of the past leaders mistake of ordering change. Instead, they argue that it takes more than establishing a task team to outline what need to be done, when and by whom and awaiting the implementation of the plan. What leaders need to be aware of is that there is transition during the course of any change attempt, state Bridges and Mitchell (2000). They differentiate change that is external (for example the new policy or practice which the leader is attempting to roll-out) from transition which is internal ("a psychological reorientation that people have to go through before the change can work", in Bridges and Mitchell's, 2000: 31, words).

Transition is not automatic simply because change is taking place and leaders often make this mistake, state Bridges and Mitchell (2000). They quote an example of a merger between two organisations which

does not necessarily imply that the organisations are then working in a unified manner. In the case where proposed change seems to be working, cognisance should be taken of the timing issue whereby transition lags change. Bridges and Mitchell (2000) state that transition takes longer because the employees need to undergo distinct processes of letting go of the organisational norms, followed by the neutral zone which is characterised by uncertainty and confusion, and finally moving forward to begin behaving in a new way.

Almost any senior executive is required to understand the transition process, argue Bridges and Mitchell (2000), and it is when the organisation is in transition that the leaders themselves often need help. This is so because at that organisational point, leaders may fail to remember that they themselves took time to understand the desired change and should therefore allow some time for their employees to embrace the proposed change, and be clear of the differences between change and transition. The higher up the organisational organogram the leaders are, the quicker they can move through the change process because a change initiative is often discussed and agreed upon at top leadership level prior to being disseminated down to the employees. For this reason, it is the leaders' role to understand how to help the employees through the transition, state Bridges and Mitchell (2000), who further add that it is a more interpersonal and collaborative role than is often played by the consultants. With the help of consultants, leaders should draw up a transition management plan which, amongst others, includes the description of the proposed change and the motivation for it to happen, a change process plan that spells out the timelines and the responsible personnel per phase, and the steps to be taken to help employees through transition. In so doing, leaders will be effectively leading change, conclude Bridges and Mitchell (2000).

Lok *et al* (2005) acknowledge that there is a relationship between leadership styles and the level of employees' commitment. They argue that leaders have an influence in shaping the organisation's culture or subcultures by setting the direction, consistency, and maintaining values and how employees behave. However, because employees interact more intimately with the subcultures, the direct effect of leadership style on commitment may be interceded by an organisation's subculture, summarise Lok *et al* (2005).

2.9.2   The manager's role

Liu and Batt (2010) argue that the manager's role in improving employee performance is to coach the employees. Other than coaching, managers may influence performance by how they shape the working relationships among their subordinates, state Liu and Batt (2010). One approach is to promote a competitive environment among the subordinates based on the assumption that under such circumstances the individuals are likely to want to perform better than their peers. An alternative approach is to

encourage a cooperative group environment based on the assumption of opportunities for mutual learning created by such an environment.

2.9.3   *The employer-employee relationship*

Frauenheim (2010) cites a finding by Gallup, a research firm, which singles out the relationship with the manager as the largest factor in employee engagement. He describes employee engagement as referring to the level of commitment to an organisation as well as to how willing the employees are to put in additional effort in carrying out their tasks. Frauenheim (2010) states that Gallup's research found that there is a direct relationship between engagement levels and the organisation's productivity plus profitability.

According to Ehrlich (1994), in his study on the American workplace, the role of the manager is to create opportunities for employees to take care of themselves, which suggests a shift from the old relationship during the post-World War II economic boom whereby employers played a "paternal" role. The employer-employee relationship can be built based on four principles, namely effective communication, problem-solving and decision-making processes which involve employees and which draws on their experience and energy, making for a conducive work environment for teamwork, and employee development. With skilful management of this relationship, he argues, economic realities and employees' emerging needs could be accommodated.

Baker (2009) concurs with Ehrlich (1994) in stating that the employees' and organisation's needs change over time. He uses a model which is centred on eight values to describe the new employment relationship which maps both the employee and the employer in one context. Baker's (2009) key eight values include, in summary, flexible working conditions which support teamwork and personal development, easy access to information; and which are customer- and performance oriented; as well as project-based work and commitment (to achieving organisational targets and employee personal objectives). In his article he documents that his model, if applied correctly by taking into consideration the interdependencies between the values, will change the organisation's culture in a manner that is sustainable and aligns with the employer's and employees' changing needs. By successfully adopting his eight values, he argues that an organisation can transform its culture at the time to one which is modern and more productive. This is based on his description of organisational culture as being a by-product of the interactions that take place between the employer and the employees. He also mentions changing the mindsets of both the employer and the employee as a precondition for changing behaviour which, in turn, impacts performance directly

and indirectly. The next paragraph critiques Baker's (2009) model.

The strength of Baker's (2009) model lies in its characteristic to incorporate both the individual's and the organisation's needs. For each of Baker's (2009) eight values, the individual's and the organisation's (represented by the employer) accountability is explained, allowing for both parties to have a sense of ownership of the change intervention. However, Baker's (2009) model falls short of demonstrating the interdependency between the eight values by simply being a list of prerequisites. The researcher is therefore unclear whether Baker's (2009) model means that the desired organisational culture is achieved when all or some of the specified eight values exist. The researcher also notes that the success of Baker's (2009) model lies, amongst others, on there being transparency (open and honest channel of communication) between the employees and the employer. Baker's (2009) model will therefore be the least applicable in organisations where change is not consultative but disseminated from the "top-down".

2.10 Models/ Methods for determining a change project success

In change management literature, there are a number of models that can be used to predict whether a change project will be successful or not (Eaton, 2010). However, "all models are wrong but some are useful", Eaton 2010: 54 quoting Professor W. Edwards Deming. This section describes three of the identified useful models, due to their structure being easy to follow, for determining a project's success prospects. The first two are by Eaton (2010), based on the organisational and individual levels respectively, and the third one by Coetsee (1999) looks at an individual level and can be extrapolated to represent the overall organisation.

Eaton's (2010) model at an organisational level is adopted from Beckhard and Gleicher's (1969) and is as follows:

$\Delta = D \text{ x } V \text{ x } F > R$

Where:

Δ = Probability of change success,

D = Dissatisfaction with the current state among the team,

V = Clarity of the vision of what the organisation is trying to achieve and what it means to individuals,

F = Clarity of what the first steps will be, and

R = The level of resistance to the change.

Beckhard and Gleicher's (1969) formula means that change success requires high levels of dissatisfaction

with the status quo coupled with a clearly articulated vision that aligns with the people's personal aspirations and a clear implementation plan. If the product of all these inputs exceeds the level of resistance to change, then change will be successful. The researcher is of the opinion that while Eaton's (2010) model at an organisational level looks simple to follow, it falls short on how the level of resistance to change (R) is determined. If the determination of R is not well articulated, the above equation cannot yield a useful result. Also, it lacks emphasis on the common scale for all the variables in this equation in order for the result to make mathematical sense. Thirdly, could any one of the variables outweigh the others such that the equation is deemed to yield a positive result if that particular variable is present? Eaton's (2010) model does have some merit in that if none of the three variables D, V and F are present, then the success likelihood of the change project will be minimal but would that imply that there is R? Notwithstanding the researcher's viewpoints, Eaton's (2010) model is useful in highlighting what could be the key factors to consider when predicting the success levels of a change project.

Eaton's (2010) model which is based on an individual's level is illustrated in Figure 2.4 below.
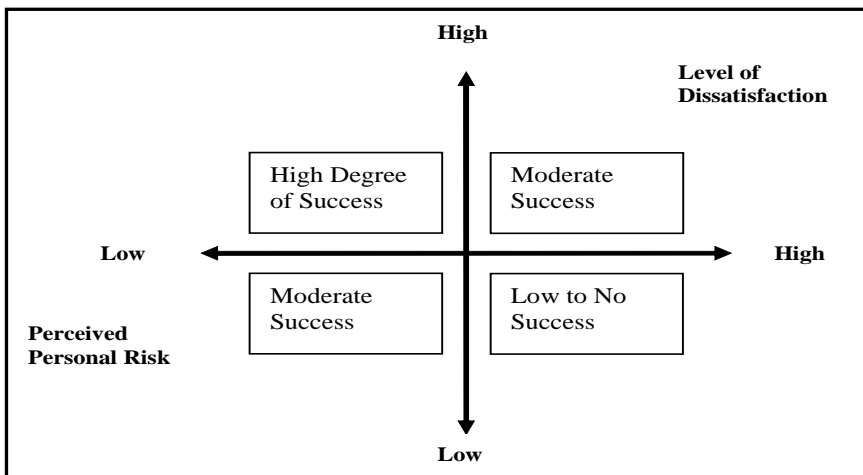
Figure 2.4: An Individual's Perspective Success Calculation Method (Eaton, 2010: 54)

Eaton's (2010) explanation of Figure 2.4 is that project success requires individuals that are dissatisfied with the status quo and low perceived personal risk. Personal risk could mean reputational risks, risk to career prospects and time spent with loved ones. The researcher's counter argument for Eaton's (2010) model at an individual level is that individuals could be dissatisfied with the then status quo to such an extent that they are prepared to take high personal risks as long as the proposed change takes place. In that case, the location of "High Degree of Success" in Figure 2.4 is swapped with "Moderate Success". A second example considers individuals who are not necessarily dissatisfied with the then status quo (low

level of dissatisfaction in Figure 2.3) but enjoy the thrill of risk-taking (e.g. excessive gambling although one has sufficient cash) and would pursue a change project. In that instance, the location of "high degree of success" is swapped with "Low to No Success". Eaton's (2010) model at an individual level does not meet the two scenarios stated above and is therefore valid under particular situations.

The third model by Coetsee (1999) is adapted from Lawler's (1992) model and is as follows:

Commitment = K x I x RR x E x SV

Where:

Commitments is synonymous with acceptance of change,

K = Knowledge,

I = Information,

RR = Rewards and Recognition,

E = Empowerment, and

SV = Shared Vision.

Lawler (1952) model is centred on the concept of "involvement" which relates to active participation in a task or participative behaviour. Coetsee (1999) added the "shared vision" element to Lawler's (1952) model to transform it from a personal to an organisation-wide model. In Coetsee's (1999) model, "involvement" is defined as an individual having the knowledge of the organisational work system, information about organisational processes, an understanding of how one will be rewarded for active participation and what the growth prospects will be after participating. The downfall of Coetsee's (1999) model is that it assumes that all of the described variables (K, I, RR, E and SV) are required in order for change to be successful. The researcher argues that with one of the variables being present, proposed change can be supported although the support would improve with more variables. For example, it could solely take an individual's prospects for growth in capacity and contribution (part of RR) for him or her to support a change project.

Based on the discussion of the three project success models presented in this section, it is evident that there is no right model as each one is subject to interpretation. Therefore, in alignment with Professor W. Edwards Deming's statement quoted by Eaton (2010), all models are wrong.

2.11 Chapter Summary

This chapter has captured the history of change management and articulated the differences between

change management and other disciplines it is intertwined with in section 2.1. The available change management categories were summarised and it was shown, through examples, where typical models fit within these categories. The third section focussed on the forces-, types- and targets of change. The generic reasons why organisations resist change followed this, after a review of the four-phase "change cycle" for organisations that are undergoing change. The elements of organisational culture were then explored, followed by the approaches which organisations could adopt to better manage the change process. Obstacles that could potentially be encountered during the change process were also highlighted. A detailed review of the contributors towards performance, both at a personal and overall organisation level was given, as well as a summary of how constant organisational change impacts performance, including the key role players' influence on organisational performance. The last section looked at the academic models for determining a change project's success levels. The next chapter, Chapter 3, will provide details on the research design/ methodology.

CHAPTER THREE: RESEARCH DESIGN/ METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that was used in order to answer the research questions outlined in Chapter 1. It sets out the paradigm used for the entire research and spells out the applicable secondary research method used, which will be presented in detail in the next chapter. For the primary research, this chapter describes how the data was collected, selected and analysed once the fieldwork had been completed.

3.2 Aim and Objectives of the Research

The aim of this research is to use existing data and generate new data in order to establish the extent to which the new Eskom Transmission lifecycle model impacts a range of organisational variables. The sources of existing data are the academic literature as covered in Chapter 2, and the Eskom policies and directives on change management, as will be presented in the next chapter.

The objectives of this research are linked to the implementation of the new lifecycle model within Eskom Transmission and are summarised below.

- To determine the impact of the followed procedure on the model users, its management and inter-departmental relations,
- To document the lessons learnt during the implementation of the lifecycle model,
- To add a case study to the scholarly body of knowledge to test adherence to change management principles when implementing organisational model change,
- To provide a post-mortem report to the Eskom Transmission management team as part of project performance management, and
- To acquire personal knowledge on the available procedure(s) to be followed prior to the implementation of a model or process change within the Eskom organisation.

The data acquisition and interpretation processes to be followed, as described in sections 3.3 to 3.5 below, informed the design of the above-mentioned objectives to help address the research problem stated in Chapter 1.

In order to meet the above-mentioned aim and objectives, this research used a qualitative approach. The results are therefore singular as the researcher was able to draw conclusions for her specific organisational context, as opposed to being general.

3.3 Data Collection Strategies

Two methods were used to collect existing data. The first method comprised an electronic search on the Eskom intranet for change management related articles, reading them and extracting relevant content to inform Chapter 2. For the second method the researcher spoke to Eskom management to establish whether organisational directives and policies on change management exist; who referred her to search the intranet and engage with the Human Resources department. A former organisational change management manager provided the researcher with publicly available documentation (for all Eskom employees) on Eskom's change management policies and directives which was then summarised. An intranet search for policies and directives was done but no relevant additional information was found.

To generate new data, the researcher sought subjective information through human interpretation rather than what the researcher terms the "scientific truth". Therefore, the chosen and most appropriate methodology for collecting data was the qualitative approach as it allows for descriptive and extensive information gathering when using a small sample, rather than detailed and precise analysis when using the quantitative approach. A structured/ semi-structured questionnaire was used as the primary method to generate new data. Other methods such as interviews and meetings with focus groups were not used due to time factor. The researcher also felt that with interviews and group meetings some respondents may not open up especially if their management was also represented in the same meeting due to power imbalances, hence some data could be missed. In the case of conducting interviews with individuals who rank higher than the researcher in the organisation, power imbalances could negatively affect the quality of the data collection process. On the other hand, filling-in of a hand-delivered questionnaire at the respondent's convenient environment would enable more data to be collected as participants would feel more comfortable about sharing data. It is therefore implied that this research adopted the interactive approach in collecting new data due to the influence brought by social interaction to the research.

3.4 Research Design and Methods

This section outlines the methodology used for the primary research in designing the structured/ semi-structured questionnaires as well as the process followed in recruiting the research respondents or

participants. It also gives a description of the pre-testing and validation process of the questionnaire used, and how the questionnaires were administered.

3.4.1   Description and Purpose

3.4.1.1   Construction of the Instrument

Goldkuhl and Cronholm (2010) suggest that researchers should design research questions that are relatively explicit, yet not too restrictive by making allowance for refinement during the study progress, which will support and govern the researcher during the data collection. The contents of the survey questionnaire (refer to Appendix 3) were informed by the literature from chapter 2, the research questions in chapter 1, consultations with the organisational field experts, and finally developed in an iterative process. It is worth noting that this research did not use the available prescribed Eskom change management policies and directives to develop a hypothesis in designing the survey questionnaire.

Closed questions were mainly designed so as to get trends and patterns, and participants had to choose amongst predefined options. However, there was an option in the "comments" section for participants to put pertinent additional thoughts and ideas that could be incorporated in the analysis.

The questionnaire was designed in a seven-category format. The *first category* required the respondent's profile in terms of gender, level of seniority in the organisation, the division worked for, and the numbers of years spent in the organisation. This would particularly be important in the analysis stage to determine trends in responses based on the profiles. The *second category* relates to understanding whether a change management process was applied when implementing the new lifecycle model. *Category three* probed into the effect of the new model on people's performance, their attitude towards management, control mechanisms and how the Transmission departments now relate with each other. The relations between management and employees are explored in *category four*. The impact of the implemented change on the Eskom Transmission divisional goals and vision is investigated in *category five* while *category six* is an extension of category five and focuses on the how the implemented change will impact the rest of the Eskom divisions if rolled out across the entire organisation. The last category, *category seven*, intends to get the respondents' views on whether they thought that the new model had been fully rolled-out and whether the change management aspect of the model was well managed within Eskom Transmission.

The Likert Scale was the chosen type of scale for the questions in categories two to seven which ranged

from the extremes of "strongly agree" to "strongly disagree", with the mid-point being "neutral". Each respondent had to answer based on his or her experience and general perceptions. The scale choice was selected because it allowed the respondents to answer the questions directly and reduce the level of ambiguity in the provided responses.

Only one type of comprehensive questionnaire for all the stakeholder groups was used in order to minimise the potential for bias and for ease of data management and analysis.

3.4.1.2   Recruitment of Study Participants

The researcher used a judgmental sampling method to identify the participants in the sample as she deemed the chosen participants would supply the necessary information. This research primarily targeted participants of ages between 28 and 45, both male and female, that were in the Eskom organisation, at managerial and non-managerial positions, for at least the past two years as they would have already been in the chosen environment during the transition phase from the old model to the new one. The question on the number of years spent by the participant in Eskom in particular was not part of the questionnaire and this judgement was made based on the researcher's recollection of whether the participant had been in the organisation for longer than two years or by asking the participant where more likely but unsure. In order to guard against non-response, the sample size of this research was at least 70% of the total number of employees or potential respondents from Transmission Execution and Grid Planning departments (refer to Figure 1.1 for the systems map) who were already under Eskom's employment during the transition phase to make up the case study. However, since both departments were located at the same premises, namely Megawatt Park, this was a tactical decision hence non-response was expected to be minimal as the researcher could easily follow up on the questionnaires' progress. In total, there were approximately 70 employees within Transmission Execution and Grid Planning departments, of which less that 35 (50%) have been in the same departments over the past two years.

Prospective respondents were either visited in person or telephoned to clarify the aim of the survey prior to sending them the questionnaires. The time to be spent on answering the questionnaire, confidentiality of responses as well as non-disclosure of the names of the respondents were spelled out in order to increase the response rate. The actual response rate was 22 out of 26 questionnaires. They were also sensitised that their participation in the project was voluntary, there would be no monetary gain for participating, and that they could decline to participate or withdraw from the study at any time without any negative consequences.

The chosen sampling method was deemed to be appropriate for this research. For example, one potential respondent within Grid Planning, after having assessed the contents of sections two to seven of the questionnaire, felt that he was incapacitated to respond meaningfully as his term within the department was just under two years, and subsequently asked for withdrawal from the study. In a research type that seeks to answer closed questions (as per the questionnaire design of this research), resorting to other sampling methods such as snowball and accidental would have added minimal value because these methods are based on chance, amongst others.

3.4.2   Pre-testing and Validation

A draft questionnaire was sent together with the ethical clearance application form which summarises the role and objectives of the project, and the research questions to be answered during the research, to management at Transmission Execution and Grid Planning to check for relevance to the research question and adequacy for a research-type of study as part of validation. This was also to ensure that each of the research questions had been comprehensively catered for in the questionnaire and that there was adequate balance between the number of questions asked per research question. It was also compared to the research questionnaires of colleagues who were also doing research with various academic institutions in terms of questioning style and general questionnaire layout.

The feedback was generally positive (refer to Appendix 1). There were, however, suggestions to include questions that would focus on the Eskom goals and vision in relation to change management since a lot of people actually do not know what Eskom's goals and vision are. It was also suggested to add a question to assess what model users' sentiments are about the new model as change usually has a negative sentiment whilst going through it. Thirdly, a comment section at the end of each section was recommended in case respondents did not wish to wait until the end of the questionnaire to provide comments. The above feedback was incorporated into the final questionnaire.

3.4.3   Administration of the Questionnaire

The questionnaires were hand-delivered to each of the prospective respondents with an informed consent letter (refer to Appendix 2) from the research institution that displayed the researcher's signature and date of signing at the bottom. The second page was the respondent's consent letter to participate in the survey that required the respondent's full names, signature and date of signing for forwarding to the research

institution as proof of the "raw" data that informed the data analysis stage for this project. This would increase the credibility of the research findings. The rest of the questionnaire pages pertained to the questions per category which the respondents had to mark either with a tick or a cross, according to the scale classification provided. Each of the potential respondents was requested to send their responses to the researcher within a time-span of one week from the date of receiving the questionnaire. The researcher sent out the questionnaires on the 1st of October 2010 and received the last response by the 8th of October 2010.

3.5 Analysis of the Data

This research assumed the same viewpoint as Goldkuhl and Cronholm (2010) that data analysis is not a routine process but a creative and iterative process that includes categorisation and validation.

Categorisation was achieved through the use of structured questionnaires, as discussed above, to ensure that there is an adequate level of focus on the subject and to improve data management during the analysis stage. As part of data *validation* in cases where comments were given, data was conceptually refined by paying attention to the use of words or the "linguistic formulations in the empirical statements", as Goldkuhl and Cronholm, 2010: 190, put it. In such cases, the researcher adopted an interactive approach by conversing with the respondents in person to clarify the data presented or the concepts used. For example one respondent commented that "Change management does not exist in Transmission. Changes happen over night without feedback from departments, groups etc. There is no engagement with people, departments.". On consultation with the respondent, it was clarified that the choice of terminology used was meant to refer to the degree of the various issues identified and not necessarily non-existence thereof. This was to ensure the quality of data prior to categorising and formulating theories.

Since the researcher is part of the organisational environment that is affected by the lifecycle model in question, it was almost impossible to be unprejudiced in the data collection; a process which is informed by the research questions designed by the researcher herself. According to Carolan (2003), as cited by Walls, Parahoo and Fleming (2010), this is what is termed "reflexivity" which is concerned with the researcher's awareness of his or her knowledge and practical experience influence on the data gathering and analysis. Goldkuhl and Cronholm (2010) agree with the above statement by Carolan (2003) by stating that existing theories call for non-bias during the data collection and analysis.

Appropriate coding was used to prepare the data for analysis and could, for example, be open (whereby data was allowed to "speak" for itself) and/or axial (conditional relationship guide). Due to the time limitation to conduct the fieldwork and interpret the results thereof, this research utilised established theories to analyse the data and did not seek to develop new theories as the latter requires pre-existing knowledge integration and synthesis (Goldkuhl and Cronholm, 2010).

A content analysis method of data analysis was used whereby the content of text and the occurrence frequency of a particular response were noted. *Firstly*, the profiles for the various stakeholder groups were presented in a table format (informed by section 1 of the questionnaire) and followed by the justification of the suitability of the sample participants. *Secondly*, each of the five questions of this research was mapped with the corresponding one or more sub-questions (for sections 2 to 7 of the questionnaire) in the questionnaire. A summary of the fieldwork responses from the different stakeholder groups per question were then narrated and presented under an appropriate heading which relates to one of the five research questions. In cases where comments were provided in the comments section, the comments were also presented and checked for alignment with the responses obtained. Emerging theme(s) were then deducted for each of the stakeholder groups. *Thirdly*, Eskom's change management principles were presented and critiqued prior to a detailed description of the three components of the model (Eskom's Change Management Model) itself. *Fourthly and lastly*, a consolidation of the emerging themes per stakeholder group, the Eskom's Change Management Model and literature review was presented in relation to the research questions. In summary, axial analysis was used to analyse data; whereby the primary research findings (derived using content analysis method) and the literature review findings were compared with the available Eskom directives and policies on change management to establish if the practices comply with the governance documents of the overall Eskom business which provide organisational direction.

3.6   Chapter Summary

This chapter has set out the approach of this research and justified the choice thereof. It has also highlighted how the chosen approach was different from others. The research aim and objectives have been articulated and linked to the appropriate data collection strategies, both for secondary and primary research. Particular attention has been paid to the research methods for the primary research, which included highlighting the type of instrument used, a discussion on how the instrument was designed and the strategy used to recruit the participants for the primary research. Towards the end, a summary of the pre-testing and validation of the instrument, the administration of the instrument, and how the data was to

be analysed once all the secondary and primary research was completed has been provided. The next chapter will present the results from the primary research as well as document the findings from the secondary research.

CHAPTER FOUR: RESULTS AND DISCUSSION

4.1   Introduction

This chapter presents the results from the primary- and secondary research. Primary research has been covered by structured and semi-structured questionnaires which were handed to the employees within two divisions of the Eskom organisation, namely Transmission as well as System Operations and Planning, as well as to the Consultants to Transmission. On the other hand, secondary research was conducted through searching the Eskom intranet and by engaging Eskom management to source the available Eskom change management documentation such as policies and directives. Around the middle of the chapter, a consolidated view of the results from the primary and secondary research in relation to the research questions are reported on as part of the discussion. Towards the end of the chapter the change management models identified in chapter two are critiqued in relation to the secondary research findings. The main findings of this research are then summarised prior to the chapter conclusion.

4.2   Primary Research Results

The following key points were noted in the obtained questionnaire responses:

- The three stakeholder groups, namely the System Operations and Planning employees, the Transmission employees, and the Consultants to Transmission, totaling 22 out of 24 persons, filled-in and returned the questionnaires handed to them except for four respondents (three System Operations and Planning employees and one Transmission employee).
- Most respondents selected either the "agree", "neutral" or "disagree" options and in very few instances were the "strongly agree" or "strongly disagree" options selected.
- In one instance, the respondent selected both the "neutral" and "disagree" options for one question (3.5) and the researcher amended the selection to read "disagree" as the selection was mathematically on the negative half of the scale. One Transmission employee respondent also did not fill-in section 2 of the questionnaire and was not included in the feedback for section 2.

The aggregated selected option per question per stakeholder group was reported on where it was at least twenty percent of the specific group sample.

The results of the findings from the fieldwork are summarised in sections 4.2.1 to 4.2.7 below. In Figures 4.1 to 4.6 the following legend should be noted:

SA = Strongly Agree

A = Agree

N = Neutral

D = Diasgree

SD = Strongly Disagree

4.2.1   Respondents' Profiles

Table 4.1 below gives a summary of the profiles of the respondents to the research questionnaire.

Item		Stakeholder Group		
		System Operations & Planning employees	Transmission employees	Consultants to Transmission
Work experience (in years)	0 – 2	0	0	0
	>2 – 5	0	4	0
	>5 – 10	2	5	0
	>10 – 15	2	3	1
	Over 15	0	3	2
Gender	Male	3	8	3
	Female	1	7	0
Type of employment	Permanent	4	15	0
	Consultant/ Contractor	0	0	3
Level of management	Senior-management	0	0	-
	Middle-management	3	12	-
	Non-management	1	3	-
Total (number of respondents)		4	15	3

Table 4.1: Respondents' profiles

It follows from Table 4.1 above that the total number of respondents was twenty two (22). Of the total, four (4) were System Operations and Planning employees, fifteen (15) were Transmission employees and the remaining three (3) were consultants to Transmission. The respondents mostly had at least five years of work experience and were at least at middle management level. The duration of work experience was

particularly important in the selection of respondents to ensure higher credibility of feedback in case the researcher's sample size was deemed not to be large enough for the purpose of conducting academic research.

4.2.2 Consultation and Implementation Process of the new Model

Figure 4.1 below presents the results of section 2 of the questionnaire prior to the discussion thereof.
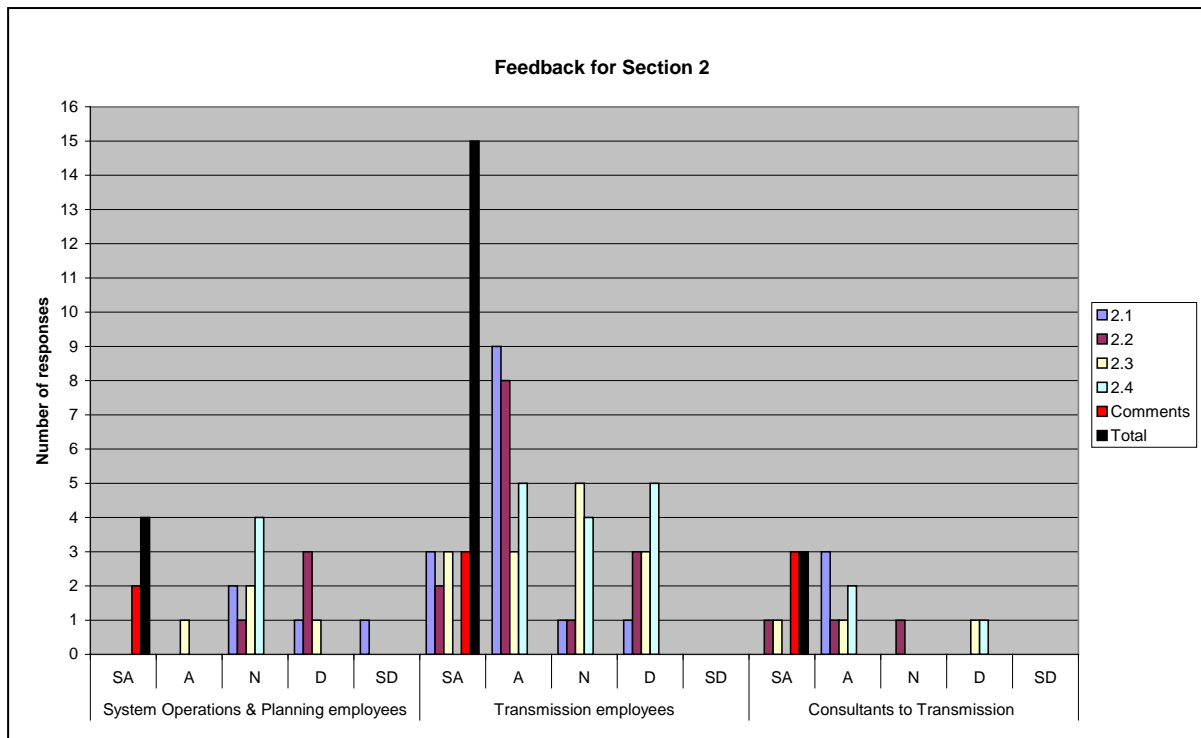
Figure 4.1: Feedback for Section 2 of the Questionnaire

It follows from Figure 4.1 that none of the feedback obtained from System Operations and Planning employees for section two of the questionnaire was positive as there was no selection of either the "strongly agree" or the "agree" options. These results align with a comment made by one respondent from Transmission that "the implementation process of the new model was informal as there was lack of formal engagement with other departments external to the execution department, such as Grid Planning", who are directly impacted by the new model.

It was clear from Transmission employees' feedback (12 out of 14 for question 2.2) that engagement of the relevant stakeholders was done during the implementation of the new model. The consultants to Transmission also held the same viewpoint as they all agreed.

Transmission employees as well as the consultants to Transmission predominantly agreed to the question relating to the provision of training on using the new model (7 out of 15 and 2 out of 3 respectively for question 2.3). Of the remainder of the feedback from Transmission employees, 4 were "neutral" and 3 were "disagree".

Transmission employees' feedback for question 2.4 was almost equally split between the "agree" (5 out of 15), "neutral" (4 out of 15) and "disagree" (5 out of 15) options. The consultants to Transmission indicated for question 2.4 that there are sufficient coaches who are experts on how to interpret and apply the new model.

The comments (eight in total) provided in the comments section align with the above analysis as they indicate that there was consultation although this could have been better managed by including other directly affected stakeholders. Performance enhancing mechanisms such as training and coaching or "leadership", as one respondent put it, also required attention during the implementation phase of the project. It is therefore appropriate to deduce that the implementation of the new model is viewed as being radical from System Operations and Planning's perspective while it appears to be evolutionary from Transmission's perspective.

4.2.3 Effect on People's Performance, Attitude towards the Management, Control Mechanisms and Inter-relationships between Transmission Departments

The results for each of the four factors in sub-heading 4.2.3 above are discussed in sections 4.2.3.1 to 4.2.3.4 below. Prior to the discussion, the feedback for section 3 of the questionnaire is plotted in Figure 4.2 below.
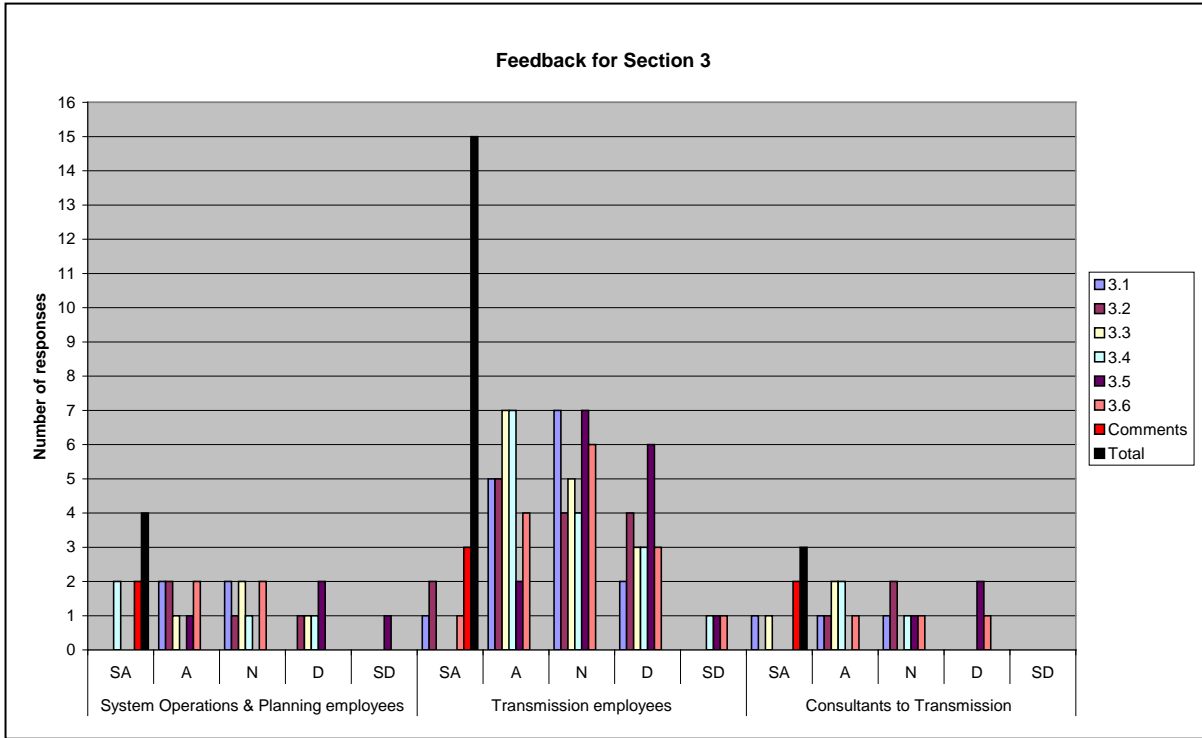
Figure 4.2: Feedback for Section 3 of the Questionnaire

4.2.3.1   Effect on people's performance

The respondents from System Operations and Planning indicated that the introduction of the new model had slightly improved dedication levels towards their work, as shown by an equal number of "neutral" and "agree" responses (2 out of 4 each for question 3.1). A similar feedback pattern was observed for the question on the level of working independently to achieve the set organisational objectives. It is therefore deduced that from System Operations and Planning's perspective that the new model has not had much positive impact on employee performance and could be attributed to poor readiness for change within the System Operations and Planning environment. Kwahk and Kim (2010) in section 2.6.1 highlighted that one of the factors that affect employees' performance is the organisation's readiness for change which can manifest in forms such as how conducive the environment is for performing and have adequate preparatory measures been taken to foster the desirable employees' attitude.

Transmission employees' feedback was similar to that of System Operations and Planning employees (7 out of 15 were "agree" and 6 out of 15 were "neutral") on the question relating to dedication levels. The consultants to Transmission mostly agreed (2 out of 3) to the same question.

For the question relating to working independently (3.2), most Transmission employees (7 out of 15) indicated that there is more independence since the introduction of the new model. Of the remainder, the feedback was equally split between the "neutral" and the "disagree" options (4 out of 15 each). The feedback from the consultants to Transmission was mostly "neutral" and could be attributed to the norm that consultants typically work flexibly (independent working patterns). In comparison to System Operations and Planning, higher independent working levels were observed within Transmission.

Therefore, in comparison to the deduction made for System Operations and Planning, the new model has better impacted employee performance at Transmission than it has at System Operations and Planning. A positive impact on performance was also observed for Transmission division's consultants.

4.2.3.2   Attitude towards management

Based on the predominantly "neutral" feedback obtained (2 out of 4 for question 3.3), it is deduced that the employee-employer relations have neither improved nor worsened within System Operations and Planning since the implementation of the new model. On the other hand, the employee-employer relations within Transmission have marginally improved as indicated by half of the responses being affirmative (7 out of 15) while the balance was mostly "neutral" (5 out of 15). All feedback from the consultants to Transmission was positive for the question relating to the employee-employer relations.

4.2.3.3   Control mechanisms – indirect (via documentation) and direct (management)

The respondents from System Operations and Planning mostly agreed (2 out of 4 for question 3.4) that Transmission is well organised to practice change management owing to the fact that policies, procedures and routines are available. Most of the Transmission employees' feedback (7 out of 15) for the same question was also affirmative. Of the remainder, each of the "neutral" and "disagree" options were equally split (about 4 each). Feedback from the consultants to Transmission for the same question was mostly "neutral" and could be an indicator that there are low awareness levels of the Eskom governance documentation amongst the organisation's consultants.

For the question which assesses the level of management's direct supervision since the implementation of the new model (question 3.5), most feedback from System Operations and Planning (3 out of 4) indicated that this has since increased. In contrast, almost half of the responses from Transmission employees were "neither" (6 out of 15) and the other half was mostly "disagree" (7 out of 15), also suggesting an increase

in direct supervisory levels. The mixed Transmission's results could be an indicator of the different management styles by the respective team leaders in the Transmission environment. The consultants to Transmission's feedback for the same question also mostly indicated an increase in direct supervisory levels.

4.2.3.4   Inter-relationships between Transmission departments

Based on feedback from System Operations and Planning employees for the question relating to the inter-departmental process interface within Transmission (question 3.6), half of them were "neutral" (2 out of 4) and the other half was affirmative. These findings could be an indicator that the employees' level of awareness of the Eskom business is confined within their immediate environment and is, therefore, only self-serving or that the inter-departmental process interface is not adequately communicated across the organisation.

In contrast, feedback for the same question from Transmission employees showed an almost equal distribution between the "agree", "neutral" and "disagree" options (approximately 5 out of 15 for each; 5, 6 and 4 respectively). Therefore, in comparison to the System Operations and Planning context on the inter-departmental relationships within Transmission, there is a more urgent need for engagement of Transmission employees on how the new model interfaces with the other departments' processes; although both divisions require engagement. The results from Transmission's consultants were similar to those of its employees (1 for each of the "agree", "neutral" and "disagree" options). The findings for the former could be attributed to the fact that the consultants are not part of the organisation's permanent staff and therefore tend to not necessarily be acquainted with an organisation's entire "process flow" or value chain.

4.2.3.5   Comments for section three

A significant number of respondents provided varied comments for section three. One respondent commented that there is "better focus on one's activities" since the introduction of the new model, while another raised concerns around delayed receipt of information from other departments. The same view as the second respondent was affirmed by a third respondent whose comments implied that Eskom Transmission management lacked objectivity in approving the new model as the inter-departmental process interface, translated from "processes", is not aligned. One of Transmission's consultants reported almost similar comments to the second and third quoted respondent when stating that "there are still gaps

which need to be addressed to ensure that the new model runs more smoothly to increase efficiency". One respondent from each of the two divisions explained that Transmission recently adopted, implying "adapted", the new model and lags behind the other Eskom divisions who have been using the new model since 2005, while the other highlighted that both Transmission and System Operations and Planning divisions recently started using the new model. The latter respondent summarised that Transmission's adoption, also implying "adaptation", of the new model will "ensure that there is common use of terminology across all the divisions" and this statement infers improved organisational performance due to lower inefficiencies, such as misunderstanding between project team stakeholders.

4.2.4   Relations between Transmission Management, Employees and Departments

The results for each of the three relationships in heading 4.2.4 are discussed in sections 4.2.3.1 to 4.2.3.3 below. Figure 4.3 below presents the feedback for section 4 of the questionnaire prior to the results discussion.
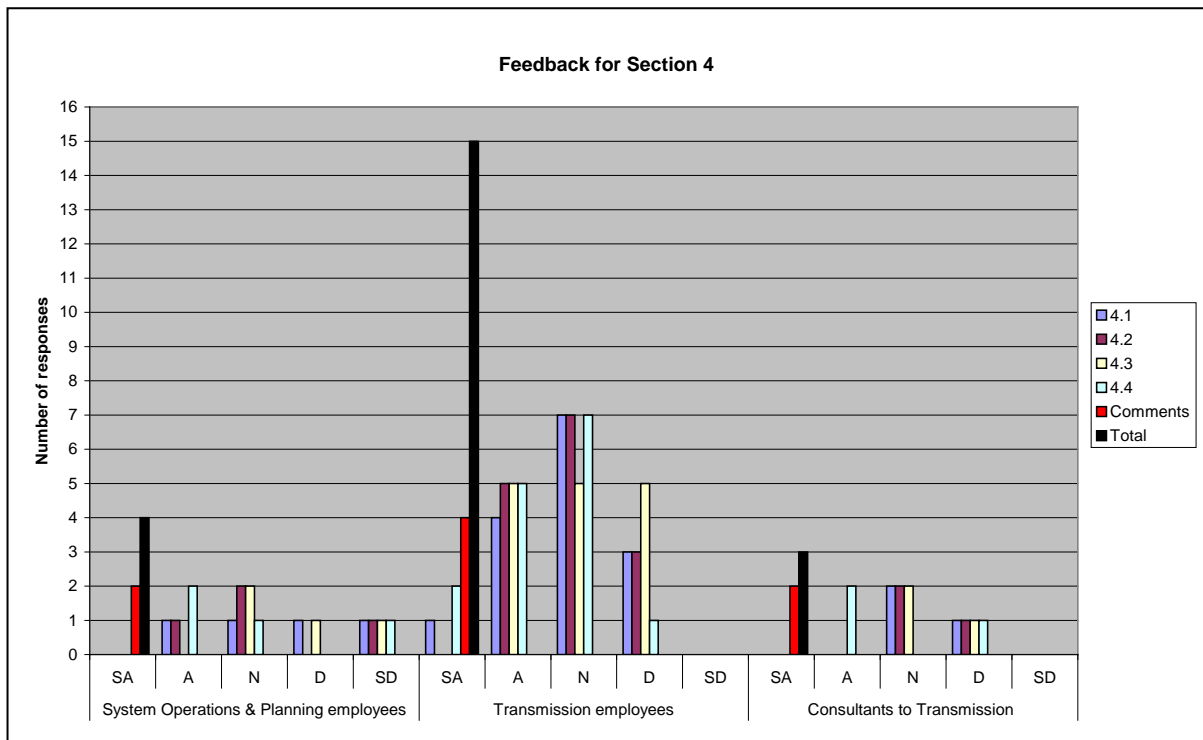
Figure 4.3: Feedback for Section 4 of the Questionnaire

4.2.4.1   Inter-departmental relations between management

Feedback from System Operations and Planning employees for the question to test whether there are improved working relations between management across the affected departments as a result of the new model (question 4.1) was equally split between the "agree" and "disagree" options (2 out of 4 for each). Some of the comments provided included statements such as "it is still early stages to judge the impact of the new model on the working relations" between either management or the employees.

In contrast, feedback from Transmission employees for the same question was mostly "neutral" (7 out of 15) and the remainder was mostly "agree" (5 out of 15). Similarly to the comments provided by the System Operations and Planning employees, some of the Transmission employees thought that the new model is still at its infancy stages and therefore it is not practical to measure its impact on the employees and on the organisation's effectiveness. One respondent further commented that "not all the stakeholders bought into the concept" while another indicated that "the roles and responsibilities are not clearly defined and questioned for appropriateness hence there is still a lot of redundancy". Similar results and comments were affirmed by the consultants to Transmission when some reported that "the roles are still ambiguous" and that "the real learning and changing phase starts now, after the implementation, and the relationships will develop to better, translated from "higher", levels once experience has been gained".

4.2.4.2   Intra- and inter-departmental relations between employees

Most of the feedback from System Operations and Planning employees for the question to test the intra-departmental relations (question 4.2) since the implementation of the new model, was "neutral" (2 out of 4). Similar results were obtained from Transmission employees (7 out of 15) as well as the consultants to Transmission (2 out of 3) for the same question.

The System Operations and Planning employees' feedback for the question to test the inter-departmental relations (question 4.3) since the implementation of the new model was mostly "neutral" (2 out of 4). On the other hand, feedback from Transmission employees indicated an almost equal split between the three "agree", "neutral" and 'disagree" options (5 out of 15 for each). Feedback from the consultants to Transmission was mostly "neutral". It is therefore deduced that opinions are varied amongst Transmission employees and its consultants on the question relating to synergy between the inter-departmental teams.

4.2.4.3   Effectiveness of interactions between employees

Feedback for the question relating to whether there has been an improvement in how projects are defined since the introduction of the new model (question 4.4) indicated that half of the System Operations and Planning employees agree (2 out of 4). Improved efficiency levels in the Eskom organisation could be attributed to the common use of terminology that has been introduced along with the new model's roll-out.

The responses from Transmission employees for the same question showed that half of the respondents agree, while the other half was "neutral" (7 out of 15 each). Most of the consultants to Transmission also agreed (2 out of 3). Therefore, similarly to the deduction made for the responses from System Operations and Planning employees, the new model has yielded some positive fruit towards reducing the inefficiency levels in the Eskom organisation during the project scope definition phases.

4.2.5   Eskom Transmission Goals and Vision

The Eskom Transmission vision calls for an integrated work culture, while the division's values include innovation, excellence, customer satisfaction and integrity. As such, it was deemed appropriate to test whether these elements are evident with the introduction of the new model. Sections 4.2.4.1 to 4.2.4.4 below present the primary research findings that relate to the Transmission goals and vision statements. Figure 4.4 below presents the results for section 4 of the questionnaire prior to the results discussion.
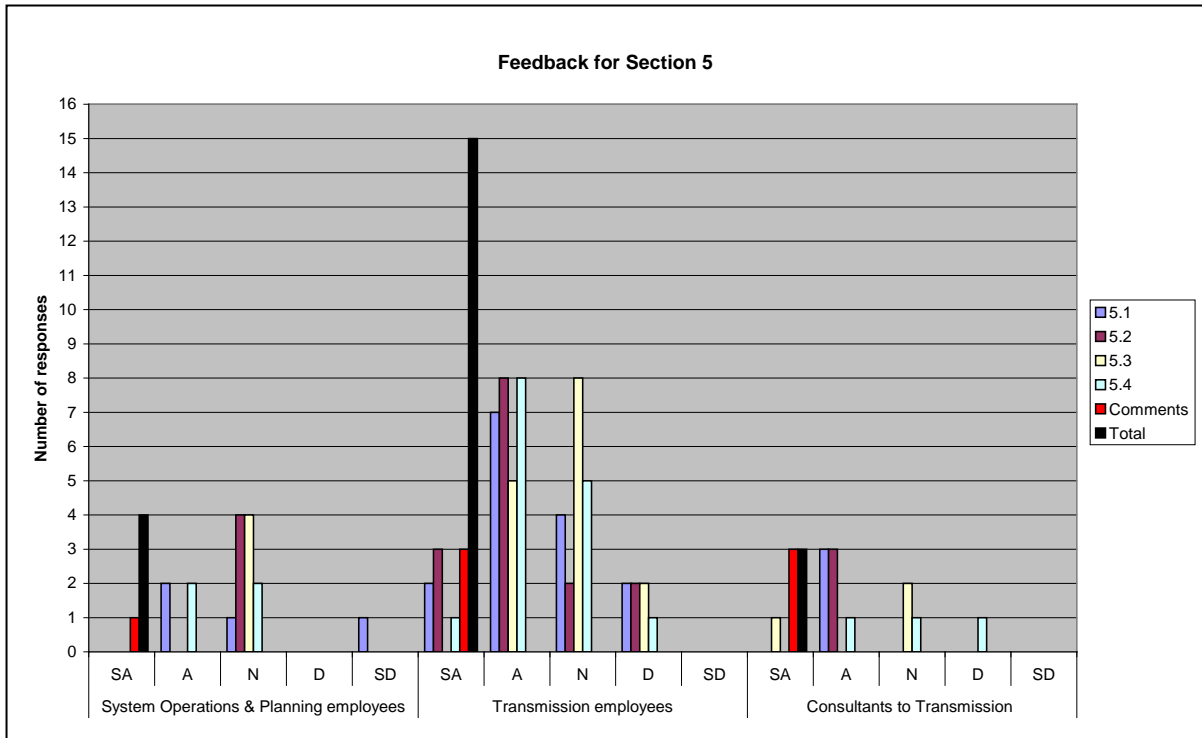
Figure 4.4: Feedback for Section 5 of the Questionnaire

4.2.5.1   Integrated approach work culture

The key question was establishing whether the new model fosters an integrated work culture between the individuals from the different departments. Most of the respondents from System Operations and Planning responded affirmatively (2 out of 4 in Figure 4.4). Feedback for the same question from Transmission employees was mostly affirmative (9 out of 15), and the remainder was mostly "neutral" (4 out 15). All feedback from the consultants to Transmission was affirmative (3 out of 3). It is therefore deduced that the new model promotes an integrated approach culture within the Eskom organisation.

4.2.5.2   Long-term suitability of implemented solutions

The question pertained to the long-term suitability of the projects that are implemented to address the electricity network constraints (question 5.2). All feedback obtained from System Operations and Planning employees was "neutral" (4 out of 4). These results could be attributed to the finding that System Operations and Planning employees hold a view that the consultation and implementation process of the new model was not well managed.

In contrast, feedback from both Transmission employees for the same question was predominantly affirmative (11 out of 15) while all feedback from the consultants to Transmission was affirmative (3 out of 3). These results, in turn, could be due to the finding that Transmission employees and its consultants were adequately engaged on the need for and the benefits of the new model during the consultation phase.

4.2.5.3   Recognition and reward for outstanding performance

All feedback from System Operations and Planning employees (4 out of 4) for the question relating to the ease of identifying and rewarding the individuals who go beyond the normal call of duty (question 5.3) was "neutral". For the same question posed to Transmission employees, most of the feedback was also "neutral" (8 out of 15) although over half of the remainder of the sample agreed (5 out of 15). The consultants to Transmission were predominantly also "neutral" for the same question. It is therefore deduced that there is little evidence that supports potential increase in the recognition and rewarding of high-performers, one of Eskom Transmission's values, now that there is a new model.

4.2.5.4   Client satisfaction with the services rendered

Half of the feedback was affirmative and the other half was "neutral" (2 out of 4 each) from the System Operations and Planning employees for the question to test for client base satisfaction levels for the services rendered to them since the use of the new model (question 5.4). The results for the same question posed to Transmission employees indicated that most respondents thought that the satisfaction levels would improve (9 out of 15), while a significant minority portion of the sample remainder was "neutral" (5 out of 6). The consultants to Transmission were equally distributed between the "agree", "neutral" and "disagree" options (1 each). One consultant commented that "it is very difficult to measure the client satisfaction levels at the moment as continuous feedback mechanisms between Eskom and the clients still need to be developed". Another highlighted that improved satisfaction levels "will come with time".

4.2.6   Model Marketability to the rest of the Eskom Divisional Businesses

Sections 4.2.6.1 to 4.2.6.4 below present the primary research results for the questions that relate to establishing whether the model is marketable to the whole of the Eskom organisation. Figure 4.5 presents a plot of the results for section 6 of the questionnaire prior to the results discussion.
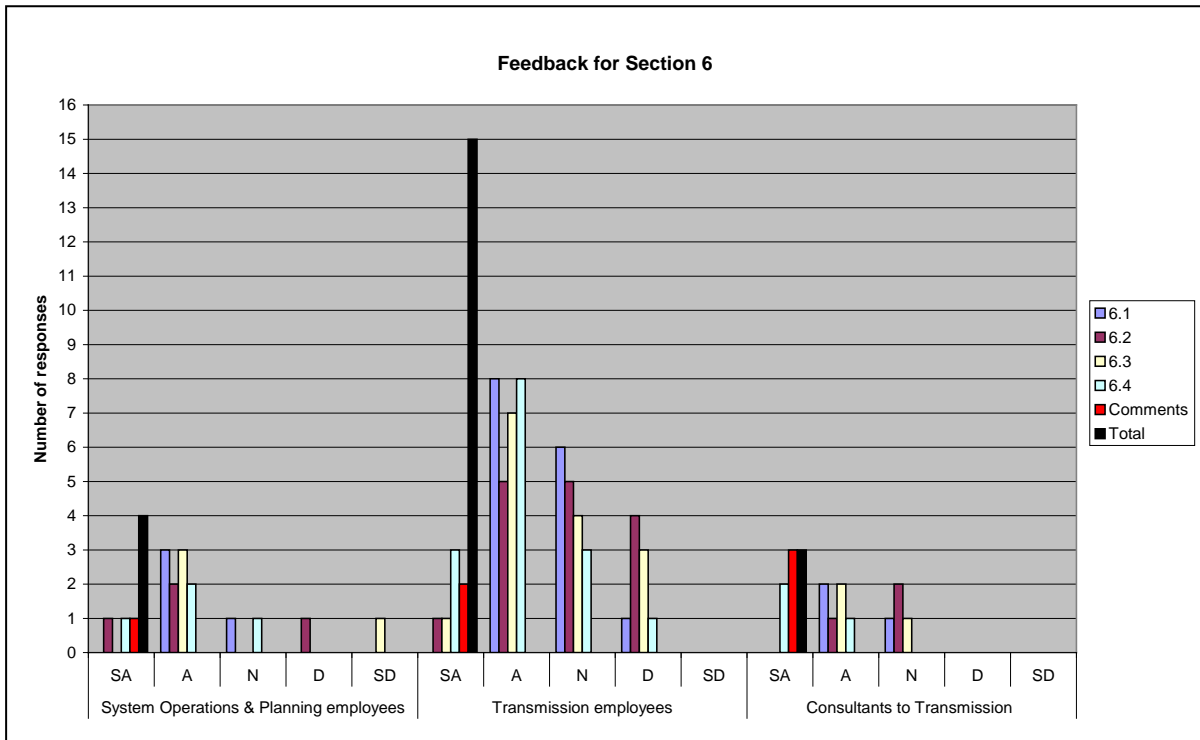
Figure 4.5: Feedback for Section 6 of the Questionnaire

4.2.6.1   *Model to have more Eskom-wide benefits than risks?*

Most of the feedback from System Operations and Planning employees indicated that the respondents thought that the roll-out of the model across the entire Eskom organisation would predominantly benefit the organisation (3 out of 4; question 6.1 in Figure 4.5). Approximately half of the feedback from the Transmission employees indicated that the new model would accrue value to the organisation (8 out of 15) while the remainder was mostly "neutral" on the issue (7 out of 8). Most of the feedback from the consultants to Transmission was affirmative for the same question (2 out of 3). It is therefore deduced that the general viewpoint is that there are positive prospects with the introduction of the new model.

4.2.6.2   *Positive sentiments amongst colleagues about the model*

For the question relating to establishing whether there are positive sentiments about the new model amongst one's colleagues (question 6.2), half of the System Operations and Planning employees gave affirmative feedback (2 out of 4). There was almost an equal distribution of the responses between the "agree", "neutral" and "disagree" options for the same question when posed to Transmission employees (approximately 5 out of 15 for each; 6, 5 and 4 respectively) while the consultants to Transmission mostly

55

selected the "neutral" option (2 out of 3). One respondent indicated that "follow-up" sessions would be necessary in future while another added that there is a major misunderstanding, translated from "lack of understanding", of the new model across all the departments. It was also highlighted that not all the stakeholders are in favour of the new model and this could infer to inadequate stakeholder engagement during the consultation phase. It therefore appears that the sentiments are currently unclear possibly due to the recent model introduction and to insufficient consultation done for all the affected stakeholders.

One respondent commented that most of the employees are too absorbed in work, translated from "busy", and therefore it is difficult to establish what the sentiments are.

4.2.6.3   *Common sentiments and understanding of the model*

Similar to the feedback for the questions regarding benefits/ risks and (positive) sentiments amongst one's colleagues, most of the feedback from System Operations and Planning employees was affirmative (3 out of 4) on the question as to whether one's colleagues share the same sentiments and understanding of the new model (question 6.3). For the same question posed to Transmission employees, feedback indicated that half of the sample affirmed this (8 out of 15) while the other half was almost equally split between the "neutral" and "disagree" options (4 and 3 out of 7 respectively). The consultants to Transmission mostly agreed for the same question. It is therefore deduced that interactions, during which information is shared, are occurring within the Eskom organisation and that employees influence each other when they are interacting. However, this is more so at System Operations and Planning than at Transmission owing possibly to a relatively large number of Transmission employees than that of System Operations and Planning.

4.2.6.4   *To recommend the model across the Eskom organisation?*

Fifty percent of the respondents from System Operations and Planning agreed (2 out of 4) that they would recommend the roll-out of the new model across the entire Eskom organisation (question 6.4). For the same question, most of the feedback from Transmission employees was affirmative (11 out of 15) and all feedback from the consultants to Transmission were positive (3 out of 3). It is therefore deduced that the sample holds a viewpoint that it would benefit the Eskom organisation if all of its divisions used the same model. Some respondents mentioned that the other Eskom divisions are already using this model and if it is adopted by all the divisions there would be uniformity in terminology, better understanding amongst stakeholders and inter-divisional projects integration would be easier.

4.2.7   General / Concluding Thoughts and Remarks

The concluding thoughts and remarks on the implementation of the Eskom Transmission lifecycle model are presented in sections 4.2.7.1 and 4.2.7.2 below. Figure 4.6 presents a plot of the results for section 7 of the questionnaire prior to the discussion.
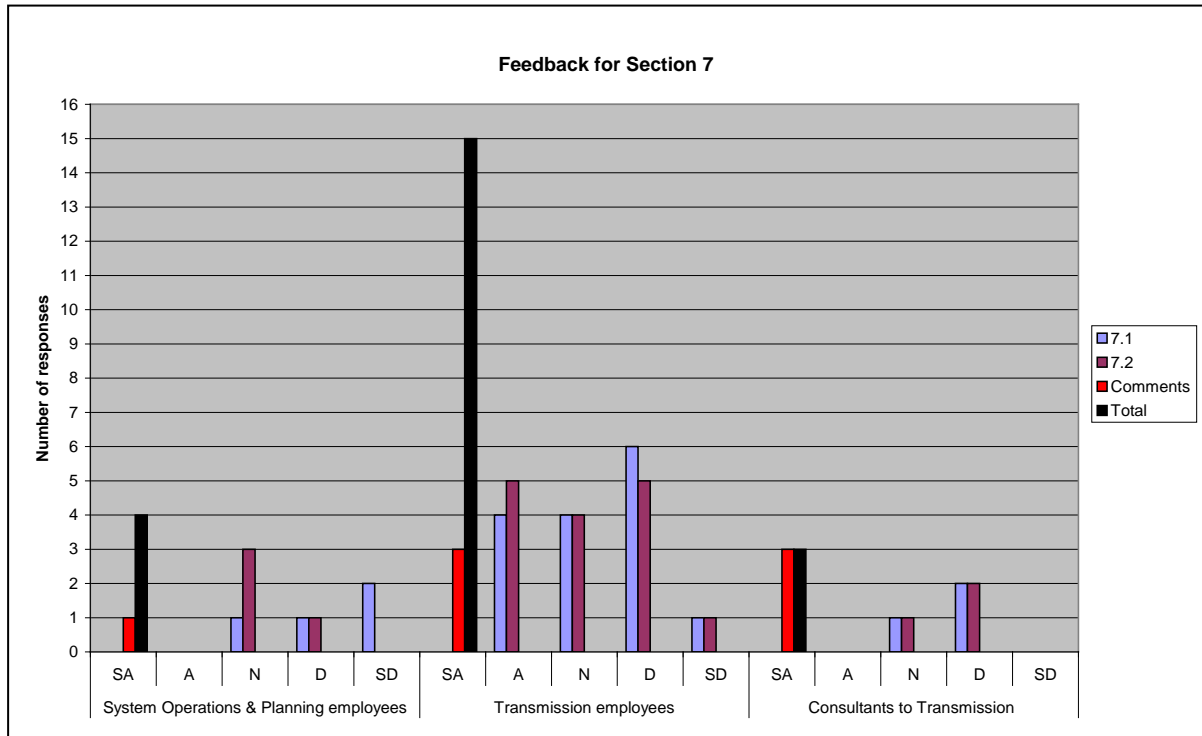
Figure 4.6: Feedback for Section 7 of the Questionnaire

4.2.7.1   Change management aspect of the model

The respondents from System Operations and Planning predominantly held a strong viewpoint that the management of change to the new model was not well managed (3 out of 4 responses were negative for question 7.1 in Figure 4.6). One respondent indicated that he was not aware of any specific interventions aimed at either him or his colleagues for the new model. His comment aligns with a deduction made earlier on in this chapter that consultation across all of the affected stakeholders was inadequate. For the same question posed to the Transmission employees, almost half of the responses were negative (7 out of 15), with the remainder being equally split between the "agree" and "neutral" options (4 each). Feedback from the consultants to Transmission was predominantly negative (2 out of 3) for the same question. It is

57

therefore deduced that the change aspect could have been better managed through adequate consultation and better implementation strategies.

One respondent reported that Transmission did not adequately consult its stakeholders as most of them require training to make them understand what the new model is about, what its benefits are and how to use it correctly. Another indicated that "change happens too quickly without feedback from departments" and that there is improper, translated from "no", engagement with the stakeholders. A third respondent mentioned that "changes appear not to be centrally controlled via a widely distributed document". He further added that improvements, translated from "revisions", to the model appear to be a "hear say" and the documentation which contains the new changes for common use by all the affected stakeholders seems not to exist.

4.2.7.2   *Full roll-out of the model*

Feedback from System Operations and Planning employees on whether the model was thought to be fully rolled-out indicated that the predominant viewpoint was "neutral" (3 out of 4 for question 7.2). These results could be an indicator of inadequate consultation of the affected stakeholders. The results for the same question posed to Transmission employees indicated that there was almost an equal spread between the "agree', "neutral" and "disagree" options (approximately 5 out of 15 for each; 5, 4 and 6 respectively). The consultants to Transmission mostly indicated that they disagree for the same question (2 out of 3). It is therefore unclear what the general viewpoint is on this question owing possibly to inadequate consultation of all the affected stakeholders while those who were consulted thought that the roll-out is still underway. One consultant indicated explicitly that the implementation of the model is currently taking place, while another expressed a need to clarify the structures and stakeholder roles, thereby confirming that implementation is in progress.

4.3   Secondary Research Results

Through engagements with Eskom management and an electronic search on the Eskom intranet, the Eskom change management policies and/ or directives were sourced from the Eskom Change Management Office which was established in 2005. The Office's role is to develop and design (effective) change management interventions aimed at assisting the organisation's employees in dealing with political and emotional barriers which accompany change within the organisation (Eskom hr advance, 2005). Eskom's Change Management is founded on the following three principles:

- working together with leadership to manage change, as leadership has the best idea of what the future entails,
- determining what internal and external factors influence change within Eskom, and how to use the influential factors to improve the organisation's business, and
- building change management skills and resilience to change within the ranks of the employees across the organisation (Eskom hr advance, 2005)

It is worthwhile to critique the above three Eskom's change management principles prior to discussing the organogram of the Eskom Change Management Office. The *first principle* attracts criticism as organisational leadership could have "the best idea of what the future entails" (adopted from Eskom hr advance, 2005) but not be in full control of realising the best ideas. Bridges and Mitchell's (2000) caution against the "top-down" approach in implementing organisational change, a feature which is implied by the first principle. They also emphasise the leaders' need to be cognisant of the two dimensions of change, namely external and internal. According to Bridges and Mitchell (2000), external change relates to what needs to change whereas internal change involves an understanding that change typically involves people who need to be psychologically transitioned in order for the proposed change to be successful. In essence, leaders are expected to understand the importance of the two change dimensions and to appropriately demonstrate the understanding thereof in their organisations, to derive optimal benefits from the change intervention. Lok *et al* (2005) are aligned with Bridges and Mitchell (2000) when stating that organisational culture or subcultures are partly shaped by an organisation's leadership. However, argue Lok *et al* (2005), leadership styles directly impact subcultures which, in turn, directly impact commitment which suggests that employees are often better placed to directly influence commitment levels compared to leadership as they interact more intimately with the subcultures.

The *second* and *third principles* also partially hinge on the concepts of organisational culture and subcultures, amongst others. The "internal factors" element of the second principle also requires an understanding of an organisation's politics and climate, while for external factors the change practitioner needs to be knowledgeable about the market (such as competitors' business and global trends) and the socio-economic factors, for example. Sound planning skills and resource sufficiency are imperative in ensuring that the use of the identified influential factors yield organisational business improvement. A regular assessment of the change management skills base as well as continuous employee training, where appropriate, is also crucial if the organisation is to be agile to change in order to fulfil the third principle.

At Eskom, a skills base strategy is now particularly important as a result of the need to change the demographic profile which led to an unprecedented scarce skills loss in the organisation over the past decade. It has been published in various Eskom newsletters that the total organisation's manpower has decreased from about 57,000 employees in year 2000 to approximately 33, 000 by year 2010. The organisation's failure to incapacitate its employees with change management skills and resilience to change would leave the employees feeling frustrated and burnt out, and therefore reflect a poor organisational "health index" which, in turn, would negatively impact organisational performance. The importance of maintaining a healthy index cannot be over-emphasised, particularly now that Eskom is embarking on a huge capital expansion build programme, of the order of over R150 billion in the next five years, to augment its ageing and limited electrical power supplies. The researcher is of the opinion that there are too many parallel changes that are taking place within the Eskom organisation, ranging from top leadership changes to continuous divisional process changes which impact on day-to-day deliverables, which, when aggregated, translate to comparatively high organisational inefficiencies despite efforts to keep the organisation "healthy". The researcher's opinion aligns with Liu and Batt's (2010) as well as Rieley and Clarkson's (2001) argument that the more stable an organisation is, as measured through employee well-being levels, the better it performs.

The business model used by the Eskom Change Management Office is one of having a central office manned by a few Change Managers (change agents) who train and empower employees in various divisions across the organisation to assist them in dealing with any changes that Eskom implements. A typical Change Project within Eskom is made up of the following roles and responsibilities (description of the responsibilities of the typical roles):

- a *champion* who is responsible for providing guidance to the project team and assists in overcoming barriers to the success of the project,
- a *steering group* which approves the team recommendation-, project plans and changes, articulates the desired state and takes up in implementation,
- A *project leader* who is ultimately accountable for the project delivery,
- A *project team* which is responsible for the project deliverables,
- An *execution team* who make the physical changes happen in the organisation,
- *Communication resource* who is a subject matter expert in communication to assist the project team to deliver effective messages required for the desired change to take place,
- A *line* who is co-responsible for making the physical changes in the organisation,
- *Employees* whose behavioural changes should reflect the desired change, and
- *Expert advisors* who are experts in the change project management.

It follows from the described Eskom's change management business model that Eskom's strategy is flexible to either being rational-empirical, power-coercive or normative-re-educative (refer to section 2.6.2), depending on the reason for the proposed change and on what needs to change, amongst others. As such, the size and constituency (in terms of roles) of an Eskom Change Project could vary. Figure 4.7 below depicts Eskom's Change Management Model.
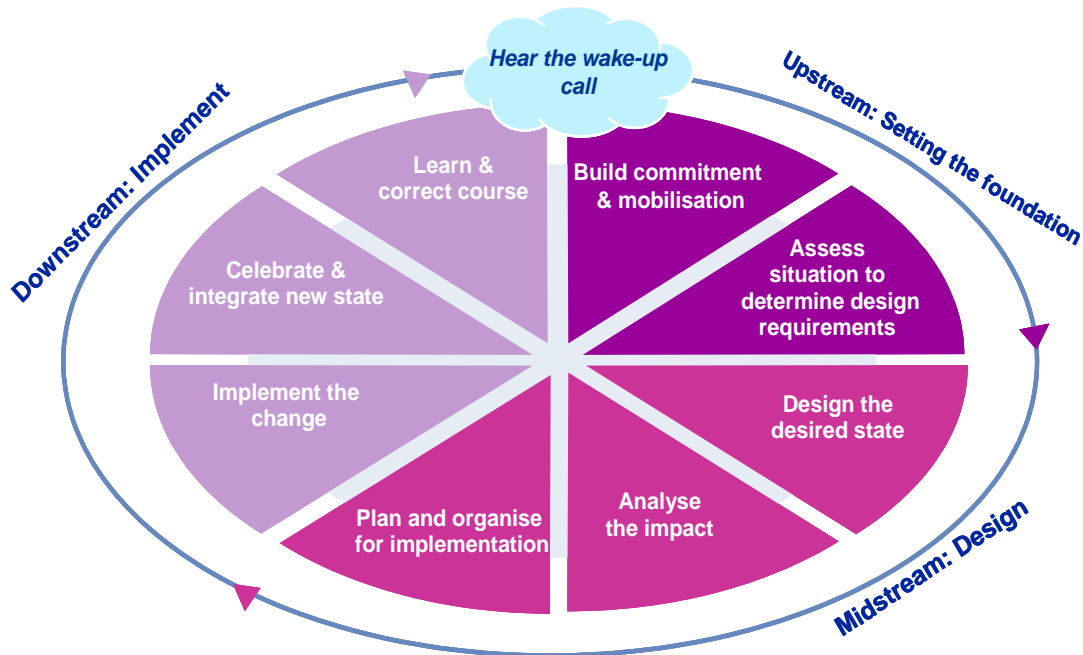
Figure 4.7: Eskom's Change Management Model (2005, 3, adapted from Ackerman and Ackerman Anderson)

It follows from Figure 4.7 above that the Eskom Change Management Model is made up of three components as described below:

Upstream component: This component sets up the foundations for change project success. It involves the creation of a clear case for change, the building of an integrated change strategy that is inclusive of top leadership upon hearing the "wake-up call", and building commitment and mobilisation by preparing the organisation to receive and participate in the planned change, and determination of the design requirements, i.e. what the desired state should incorporate and what it will take to have it implemented in the organisation. At this level, change is primarily a strategic intent and the final output of this stage is the development of a RACI matrix which lists all the key *R*esponsible, *A*ccountable, *C*onsulted and *I*nformed

61

role players involved in the activities for each step towards the final goal (from a typical Eskom Change Project role matrix described above). A clear communication timeline for the various affected stakeholders is also outlined at this stage. The organisation's readiness for change is assessed through checks for alignment with the organisation's goals and vision, involvement and support from all stakeholder groups in order to establish the stakeholders' commitment levels.

Midstream component: This component caters for the design step and involves a vivid but detailed description of the desired state by the organisation's executive team from the financial, customer and organisation's employees' perspectives. A change impact assessment is also conducted by using techniques such as focus group meetings and one-on-one focus interviews with a selected sample from all the affected stakeholder groups. The results of the impact analysis are then consolidated and documented in a directive type of document, to reflect the non-negotiable content of the project plan as well as proposed changes to the desired state. The directive is then taken to various committees for approval prior to being communicated to the steering group, the project team and all other relevant stakeholders. As part of planning and organising for implementation, a project charter with timelines is drawn which highlights the specifics of what is to change to help the employees understand the new reality they are held accountable to create, and to make them feel more in control in order to keep potential resistance to the proposed change minimal. It is also important to successfully "onboard" the stakeholders through consistent and repeated communication of the project.

Downstream component: The execution team implements the change (project plan) during the downstream component. Continuous Plan-Do-Review-Reflect meetings are held to assess the progress on the project plan and the implementation of the desired end-state. Change leaders, where required, also transition their employees through the "neutral" zone (referred to as the "chasm" zone in chapter two) in order for change to be sustainable. Once the change project has been fully implemented, rituals and events take place to celebrate the new state. An effectively implemented change project would also be designed such that it is sustainable by ensuring employee integration into the desired state. Meetings with the identified key stakeholders could, for example, be held to monitor the integration of employees post-migration and to take corrective action where integration was inadequate. Where relevant, course correction could take place and could include the assignment of misaligned staff to the new state to functions where they could be better utilised. After project completion, all lessons learnt should be documented and be accessible for use in future projects.

It follows from the description of the three components of the Eskom Change Management Model that adequate planning is one of the main emerging themes required for successful organisational change. Planning includes outlining what needs to change and how to implement proposed change through the use of processes and policies, as Melancon (2007) and Rash (2010) have argued. A well planned project sufficiently addresses potential obstacles such as stakeholder non-support for the project during implementation, as Eaton (2010) has highlighted. Pettigrew (1987) and Schneidewind (1998) further emphasise the need for understanding the interaction between the cognitive, power and resource dimensions to fully understand the constraints to organisational change and learning. As such, in alignment with Darby (2010), the appropriate methodology (change management model and method) for proposed change is, amongst others, dependent on how an organisation perceives itself and, therefore, multiple methodologies could be applicable. Of the five change management models and methods outlined by Darby (2010), the one that best resembles Eskom's Change Management Model is the *eight stage model* as it is characterised by stages such as commitment building, impact analysis and anchoring of the change; similar to the Eskom model.

4.4   Consolidation of the Primary and Secondary Research Results, and the Literature Review Findings

4.4.1   Consultation and Implementation Process of the new Model

The fieldwork results indicated that there was insufficient stakeholder engagement prior to and during the implementation phase of the project as the System Operations and Planning results showed inadequacy while the Transmission results indicated satisfactory consultation levels. Therefore, the upstream component of the project was partially fulfilled as Eskom organisational change readiness for the project was not properly managed (catered for the Transmission division but not inclusive of the stakeholders external to the execution department).

The results from System Operations and Planning respondents indicated minimal evidence of the midstream component of the project as there was no confirmation of employees' training interventions and coaching resources. These findings could be due to a potential lack of change impact assessments done which, in turn, influence the successful "onboarding" of stakeholders. Feedback from Transmission, however, showed satisfactory levels. It is therefore appropriate to deduce that the implementation of the new model is viewed as being radical from System Operations and Planning's perspective while it appears to be evolutionary from Transmission's perspective.

4.4.2   Effect on People's Performance, Attitude towards the Management, Control Mechanisms and Inter-relationships between Transmission Departments

The results for each of the four factors in heading 4.4.2 are discussed in sections 4.4.2.1 to 4.4.2.4 below.

4.4.2.1   Effect on people's performance

The survey results showed that the introduction of the new model impacted employee performance at Transmission more than it had at System Operations and Planning. These findings are based on higher independent working conditions at Transmission compared to System Operations and Planning, while dedication levels were the same for both divisions. It is therefore deduced that the employees from both divisions have possibly not adequately taken ownership of, identified with and internalised the project as per Coetsee's (1999) description of commitment to an intervention. Alternatively, the study to measure the impact on performance, if conducted at a later stage, would yield more conclusive results. In relation to the seven organisational conditions that influence employee behaviour, as outlined by Rusaw (2009), it is appropriate to claim that higher independent working conditions at Transmission compared to System Operations and Planning, have been influenced, amongst others, by the organisational culture and the employee-employer interpersonal supervisory trust.

A positive impact on performance was also observed for the Transmission division's consultants possibly owing to the flexible contractual working conditions generally entered into by consultants.

4.4.2.2   Attitude towards the management

The overall "neutral" survey findings for the test on the employee-employer relations from the System Operations and Planning respondents could potentially be as a result of lack of or inadequate stakeholder engagement for the division. Employees' behaviour within System Operations and Planning, as informed by attitude according to Alas and Vadi's (2004) study, towards the management has therefore not changed since the implementation of the new model.

On the other hand, marginal improvement to the employee-employer relations within the Transmission context could be associated with half of the responses being "neutral" and the other being affirmative which correlates with Gallup's finding, as cited by Frauenheim (2010), that the relationship with the

manager is the largest factor in employee engagement. Gallup's definition of employee engagement refers to the level of commitment to an organisation as well as to how willing the employees are to put in extra effort in carrying out their tasks. In the context of the findings of this research, it is deduced that commitment levels at Transmission surpass the System Operations and Planning levels. As such, in relation to Gallup's research findings, Transmission's productivity and profitability is expected to exceed System Operations and Planning's.

4.4.2.3   Control mechanisms – indirect (via documentation) and direct (management)

The predominantly affirmative feedback from both System Operations and Planning as well as Transmission employees for the question that tests for the existence of the Transmission change management governance documentation, is an indicator of a real, rather than perceived, role of the Eskom Change Management Office. The findings of this research also showed that the Eskom consultants are not necessarily aware of the organisation's governance documentation and this could pose performance risks for the organisation.

The increase in the level of direct supervision within System Operations and Planning could be attributed to the lack of or inadequate stakeholder engagement levels for the division. These findings indicate an alignment with Liu and Batt's (2010) study findings that the role of the manager is to improve performance by coaching. It is deduced that if managers are not empowered with information they would be unable to play the coaching role to their subordinates, as is the case within the System Operations and Planning environment with regards to the new model. Therefore the increase in direct supervision within the System Operations and Planning environment is due to either uncertainty on what is expected of the supervisors or to lower interpersonal supervisory trust, as shown by the higher dependent working conditions results.

The mixed Transmission's results could be an indicator of the different management styles by the respective team leaders in the Transmission environment although overall, including the feedback from the division's consultants, the level of direct supervision has increased. Therefore, the deduction that higher independent working conditions at Transmission compared to System Operations and Planning, made in section 4.4.2.2 above, has been influenced by increased interpersonal supervisory trust established during stakeholder engagement interventions at consultation phase of the project do not necessarily translate to a reduction in the direct supervision levels, amongst others.

4.4.2.4   Inter-relationships between Transmission departments

The results from System Operations and Planning, Transmission as well as the consultants thereto indicated the need for staff engagement from both divisions on how the new model or process interfaces with other departments within Transmission. Addressing the identified "gap" through interventions such as training would contribute towards reducing inefficiencies within the organisation. These findings are in alignment with a deduction made earlier on that stakeholder engagement, as part of the upstream and midstream components of the project, was, amongst others, not adequately managed. The corrective intervention could be extended to include Transmission's consultants because even though the consultants are not part of the Eskom's permanent staff, they directly impact the organisation's performance levels. The process interface misalignment with other Transmission departments was emphasised by a number of respondents who particularly commented on this issue in section three of the questionnaire.

4.4.3   Relations between Transmission Management, Employees and Departments

Feedback for the questions that assessed relations between management, as well as the intra- and inter-departmental relations between the employees since the introduction of the new model were predominantly "neutral". Furthermore, a number of respondents commented that it was too soon to measure the impact of using the new model on the inter-departmental relations between management, as well as on the employee relations at intra-and inter-departmental levels.

The results of the assessment of the improvement in project scope definition since introduction of the new model indicated that the new model has yielded some positive fruit towards reducing inefficiencies in the Eskom organisation. These findings are owing to the common use of terminology across the Eskom divisions, which has been introduced along with the new model's roll-out. It therefore seems that the interactions between employees during project meetings are now much more effective.

4.4.4   Eskom Transmission Goals and Vision

The Eskom Transmission vision calls for an integrated work culture while the division's values include innovation, excellence, customer satisfaction and integrity. As such, it was deemed appropriate to test whether these elements are evident and encouraged with the introduction of the new model.

The predominantly affirmative results from System Operations and Planning, Transmission and the consultants to Transmission for the type of work culture assessment, led to a deduction that the new model promotes an integrated work culture within the Eskom organisation.

There were contrasting views between the two divisions on the long-term suitability of the implemented projects to address the electricity network constraints. The responses from System Operations and Planning were negative, while those from Transmission were affirmative. This finding could be linked to the unbalanced engagement levels of the stakeholders on the need for and the benefits of the new model during the consultation stage of the project.

The "neutral" feedback from all of the System Operations and Planning respondents as well as most of the participants from Transmission and its consultants for the question that relates to the recognition and reward of excellent performance, indicated that there is little evidence that supports potential increase of recognition of and reward for excellent performance since the introduction of the new model.

Over half of the total feedback from System Operations and Planning and Transmission affirmed that the organisation's client base would be better served, and hence improve satisfaction levels for the services rendered to them. Of the remainder of the total sample, most respondents were "neutral" and these results could be attributed to the infancy stages of the project which make it difficult to have a view on whether improved customer satisfaction levels would be derived in future as continuous feedback mechanisms between Eskom and the clients still need to be developed, amongst others.

4.4.5   Model Marketability to the rest of the Eskom Divisional Businesses

The predominantly affirmative feedback from System Operations and Planning and Transmission divisions indicated that respondents thought that the roll-out of the model across the entire Eskom organisation would predominantly benefit the organisation.

The results varied for the question that assessed what the sentiments were for the new model. The respondents from System Operations and Planning shared positive sentiments about it while there was an even distribution of responses from Transmission between the "agree", "neutral" and "disagree" options. The System Operations and Planning results were surprising as the engagement levels were low for the division. In contrast, the results from the Transmission division were expected and supported by the various reasons provided by the participants who commented.

The predominantly affirmative feedback from System Operations and Planning and Transmission divisions indicated that respondents thought that their colleagues shared common sentiments and understanding of the new model. From System Operations and Planning's perspective, the common sentiments and understanding were positive while these varied among the Transmission participants. It is therefore deduced that employee interactions are occurring at Eskom and that employees influence each other while sharing information during the interactions, more so at System Operations and Planning than at Transmission due to a relatively smaller total number of employees.

Almost the entire combined sample of System Operations and Planning, Transmission and the consultants to Transmission affirmed that if all of the Eskom divisions were to utilise the same model this would increase efficiency levels across the organisation. These results could be attributed to the general viewpoint that if this was to happen, there would be uniformity in the terminology used, better understanding amongst stakeholders and the integration of inter-divisional projects would be easier.

4.4.6   *General / Concluding Thoughts and Remarks*

It is deduced that the change aspect could have been better managed through adequate consultation and better implementation strategies as most of the respondents felt that this was not well managed. Some of the reasons provided in support of this deduction included inadequacy of stakeholder engagement and a lack of or poor communication of the updated project charter with timelines.

The predominantly "neutral" responses from System Operations and Planning participants for the question on whether the model has been fully rolled-out were expected as this stakeholder group was inadequately engaged on the project. In contrast, it is appropriate to deduce that implementation of the project is still underway based on the responses from Transmission employees and its consultants as well as the explicit comments that were made which suggest that some stakeholders are still transitioning through the neutral zone from the old to the new process.

4.5   A Critique of Change Management Models

In section 2.2 of this research, five categories of change management models and methods were presented. These were the *dynamic stability model*, the *problem solving model,* the *interactive strategic planning model*, the *eight stage model* and the *dynamic organisational systems model*. Later on in section

2.10 of this research, three additional models were outlined. The first two models were by Eaton (2010) and focussed on change at organisational and individual levels respectively while the last model was by Coetsee (1999) and focussed on change at either an individual or organisation level, depending on how it is used. On comparing the characteristics of each of the eight academic models, such as the definitions and inputs into the models, it is established that both of Eaton's (2010) models resemble the *interactive strategic planning model* while Coetsee's (1999) model is similar to the *dynamic stability model*. This research has, therefore, identified five key categories of change management models and methods as outlined in section 2.2 as the three models described in section 2.10 do not constitute additional categories. It was also established in section 4.3 that Eskom's Change Management Model was derived from the *eight stage model*, a subset of one of the five categories of change management models and methods already outlined in section 2.2.

It is a challenging task to highlight the strengths and weaknesses of each of the five categories of change management models and methods due to their inter-changeability of use in practice since change, quoting Darby (2010), is multi-faceted. A thorough understanding of the identified categories of change management models and methods is necessary to ensure the best selection of the model for use at an appropriate time during a change project, emphasised Darby (2010).

4.6   Summary of the Main Research Findings

Below is a summary of the main findings from this research:

- Eskom Transmission used the Change Management Model (adapted from Ackerman and Ackerman Anderson), which, in academia, is a subset of Kotter's (1998) eight stage model, in implementing the new lifecycle model.
- The survey results showed that the introduction of the new model impacted employee performance at Transmission more than it had at System Operations and Planning. These findings are due to higher independent working conditions at Transmission compared to System Operations and Planning although dedication levels are the same for both divisions.
- The attitude of the System Operations and Planning employees towards management has been negligibly impacted. At Transmission, however, there was marginal improvement to the employee-employer relations.
- The adoption of the Eskom Change Management Model signals the use of indirect control mechanisms, such as policies and directives, in implementing the new Transmission lifecycle model. This finding was also affirmed by the results from the participants from the two Eskom

divisions.

- The introduction of the new Eskom Transmission lifecycle model was generally perceived by System Operations and Planning participants to increase direct supervision and could be due to either uncertainty on what is expected of the supervisors or to lower interpersonal supervisory trust, as shown by the higher dependent working conditions results. Varied results were obtained from employee participants at Transmission due to potentially different team leadership styles within the Transmission context although overall, when combined with feedback from Transmission's consultants, the view was an increase in direct supervision.

- There are still process interface misalignments with other Transmission departments possibly owing to inadequate stakeholder engagement during the upstream and midstream components of the project, amongst others.

- It is still premature to measure the impact of the new model on the inter-departmental relations between management as well as on employee relations at intra- and inter-departmental levels. More conclusive results would come with time as the study is repeated or done similarly to what was done in this research. However, an improvement was noted in the definition of the scope of work for projects. Therefore, the interactions between employees during project meetings are now much more effective.

- The new Eskom Transmission model supported the Eskom Transmission's vision which calls for an integrated approach work culture amongst the division's departments.

- There was little evidence that supports potential increase in the recognition of and reward for excellent performance, one of Eskom Transmission's values, as a result of the new model.

- Most of the research participants thought that the client base would be better served, also one of Eskom Transmission's values, and hence satisfaction levels would improve for the services rendered to them.

- The results to test for support of Eskom Transmission's "innovation" value (question 5.2 in questionnaire) indicated that there was no consensus between System Operations and Planning and Transmission on the long-term suitability of projects that are implemented. This finding could be attributed to unbalanced engagement levels of the stakeholders on the need for and the benefits of the new model during the consultation stage of the project.

- Most of the research participants thought that the model roll-out across the entire Eskom organisation would bring about more benefits than risks to the business. However, the sentiments from both divisions about the new model varied.

- The change aspect to the new model could have been better managed through adequate consultation and better implementation strategies as most of the participants indicated that this was not well managed.

4.7 Chapter Summary

This chapter has presented the results from the primary and the secondary research. It has also provided a consolidated view on both types of research findings in relation to the research questions and the literature review findings in chapter two. The next chapter will outline a summary of the major sections and the conclusion of this research.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter outlines the concluding statements for this research in relation to the research questions. The implications of this research are also summarised, the recommendation for future studies and for Eskom Transmission management are made prior to the brief chapter summary at the end.

5.2 Summary of the Major Sections of this Research

Chapter one, introduced the researcher in relation to the problem context, outlined the motivation for the research and presented the problem statement. The research questions to be answered during this research project were also summarised as well as the aim and objectives of the research. *Chapter two*, presented a detailed summary of the findings from the literature review study to highlight the key elements of change management, the main knowledge discipline that informed all work performed for this research, and to also demonstrate how inquisitive the researcher was to learn about the subject of change management. The identified change management literature was scanned with the research questions in mind to focus on information which would enable ease of addressing the research questions. *Chapter three*, set out the methodology that was used to conduct both the primary and secondary research. *Chapter four* presented the results from the primary and secondary research. It also provided a consolidated view on both types of research findings in relation to the research questions and the literature review findings in chapter two. *Chapter five*, establishes a flow of how this research unfolded by outlining a summary of the sequential major sections of this research; as well as answers the research questions and makes recommendations for Eskom Transmission management.

5.3 Implications of this Research

The conducted research implies that the objectives of this research have been met based on the following four reasons:

- Through conducting this research, the researcher has acquired personal knowledge on the available procedure (Eskom Change Management Model) to be followed prior to implementing a model or process change within the Eskom organisation,
- The impact of the followed procedure on the model users, its management and inter-departmental

relations have been determined,

- The main findings of this research, outlined in section 4.6, constitute a summary of the lessons learnt during the implementation of the lifecycle model at Eskom Transmission for feedback to Eskom Transmission management, and

- This research has added a case study to the scholarly body of knowledge to test adherence to change management principles when implementing organisational model change.

5.4   Recommendations for Future Studies

Based on the findings of this research it is recommended that a similar exercise be done at a later stage, and possibly using a larger sample of the Eskom organisation to better determine the impact the new model has had on the "people" living with the model. It is important to include the views of the Eskom senior management who are the drivers of the change process and compare their views to those of the employees.

5.5   Conclusion

Based on the findings made during the primary and secondary research of this project to answer the research questions, it is concluded that:

- Eskom Transmission applied a change management process adapted from Kotter's (1998) eight stage model in implementing the new lifecycle model.

- The introduction of the new model impacted employee performance at Transmission more than it had at System Operations and Planning.

- The attitude of the System Operations and Planning employees towards management has been negligibly impacted. At Transmission, there is marginal improvement to the employee-employer relations.

- There are indirect control mechanisms, such as policies and directives, that were followed in implementing the Transmission lifecycle model through the utilisation of the Eskom Change Management Model.

- The participants at System Operations and Planning as well as at Transmission held a viewpoint that direct supervision would increase with the new Eskom Transmission lifecycle model. The perceived increase in direct supervision could be based on an array of reasons such as lower interpersonal supervisory trust and varied team leadership styles.

- There are still process interface misalignments with other Transmission departments, possibly owing to inadequate stakeholder engagement during the upstream and midstream components of the project, amongst others.

- It is still premature to measure the impact of the new model on the inter-departmental relations between management as well as on employee relations at intra-and inter-departmental levels. However, an improvement has been noted in the definition of the scope of work for projects possibly owing to more effective interactions between employees during project meetings.

- The new Eskom Transmission model supports Eskom Transmission's vision which calls for an integrated approach work culture amongst the division's departments.

- There is little evidence that supports potential increase in the recognition of and reward for excellent performance, one of Eskom Transmission's values, as a result of the new model.

- The general viewpoint around customer satisfaction levels for the services rendered, also one of Eskom Transmission's values, is that Eskom's client base would be better served and hence satisfaction levels would improve.

- The results to the test for support of Eskom Transmission's "innovation" value indicated that there was no consensus between System Operations and Planning and Transmission on the long-term suitability of projects that are implemented. This finding could be attributed to   unbalanced engagement levels of the stakeholders regarding the need for and the benefits of the new model during the consultation stage of the project.

- The research participants predominantly thought that the model roll-out across the entire Eskom organisation would bring about more benefits than risks to the business.

- The change aspect to the new model could have been better managed through adequate consultation and better implementation strategies.

5.6   Recommendations for Eskom Transmission Management

The following recommendations for Eskom Transmission management are made based on the conclusion in section 5.5 above:

- Wider stakeholder engagement is necessary when implementing model or process change within the organisation as project success depends, amongst other factors, on this to minimise potential resistance to the change initiative.

- Higher independent working conditions are encouraged as these would likely result in improved organisational performance. Research by Gallup, as cited by Frauenheim (2010), justified this

statement by drawing a direct correlation between the employee-employer relationship and performance. Management should therefore establish working relations with their employees which would allow employees to work more independently yet meeting the organisation's objectives.

- Eskom Transmission management should review the lifecycle model for opportunities to improve alignment to and support of the division's goals and vision. Where necessary, performance enhancing measures should be implemented to improve commitment levels.

5.7   Chapter Summary

This chapter has briefly summarised the sequential major sections of this research. Conclusions to the conducted research have been made, as well as research implications and recommendations for future studies. Recommendations for Eskom Transmission management were also presented.

REFERENCES

Alas, R. & Vadi, M. (2004). The Impact of Organisational Culture on Attitudes concerning Change in Post Soviet Organisations. *Journal for East European Management Studies,* 1, pp. 20-39. Estonian Business School, Estonia.

Allen, N.J. & Meyer, J.P. (1990). The measurements and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, pp. 1-18.

Armenakis, A.A., Harris, S.G. & Mossholder, K.W. (1993). Creating readiness for change. *Journal of Human Relations*, 46, pp. 681-703.

Baker, T. (2009). The New Employee-Employer Relationship Model. *Organization Development Journal/ Spring*. Vol. 27, No. 1, pp. 27-36. Brisbane, Australia.

Batt, R. (2002). Managing customer services: Human resource practices, quit rates, and sales growth. *Academy of Management Journal*, 45, pp. 587-597.

Bloor, G. & Dawson, P. (1994). Understanding professional culture in organisational context. Organisational Studies.

Bovey, W.H. & Hede, A. (2001). Resistance to organizational change: the role of defense mechanisms. *Journal of Managerial Psychology*, 16, pp. 534-548.

Bridges, W. & Mitchell, S. (2000). Leading Transition: A New Model for Change. Leader to Leader Publication/ Spring. John Wiley & Sons, Inc., pp. 30-36.

Brooks, J. (2010). *A time of Change*. (google article, viewed 09 February, 2010)
<www.eweek.com/c/a/IT Management/For-Change-Management-First-You-Need-a-Plan/117147>.

Brown, A. (1995). Organisational culture. Pitman, London.

Burnes, B. (1996). No such thing as … a 'one best way' to manage organizational change. *Management Decision*. Vol. 34, No. 10, pp. 11-18.

Burnes, B. (2004). Managing Change. 4th edition. FT Prentice Hall: Harlow, Essex.

Carnall, C.A. (2003). Managing Change in Organizations. 4th edition. FT Prentice Hall: Harlow, Essex.

Carolan, M. (2003). Reflexivity: a personal journey during data collection. *Nurse Researcher.* Vol. 10, No.3, pp. 7-14.

Chen, M. (2008). Organisational Change and Innovation (google article, viewed 24 May, 2010) <http://amrjournal.blogspot.com/2008/09/organisational-change-and-innovation.html>.

Coetsee, L. (1999). From resistance to commitment. *Public Administration Quarterly Journal/ Summer,* pp. 204-222. Potchefstroom University, Potchefstroom, South Africa.

Craine, K. (2000). Designing a Document Strategy. MC2 Books, Hurst, Texas.

Craine, K. (2007). Managing the Cycle of Change. *Information Management Journal/September-October*. pp. 44-50, MC2 Books, Hurst, Texas.

Cummings, T.G. & Worley, C.G. (2005). Organization Development and Change. 8th edition. Thomson South-Western: Ohio.

Darby, M. (2010). The 9-Vector View of Human Performance. *American Society for Training and Development/ April*, pp. 38-40.

Deal, T., & Kennedy, A. (1982). A corporate culture. Reading, MA: Addison-Wesley.

Denison, D.R. (1990). Corporate culture and organisational effectiveness. New York: Wiley.

Eaton, M. (2010). Why change programmes fail. *Training Journal/ February,* pp. 53-57.

Ehrlich, C.J., (1994). Creating an Employer-Employee Relationship for the Future. *Journal of Human Resource Management/ Fall.* Vol. 33, No. 3, pp. 491-501. John Wiley & Sons, Inc.

Eskom Change Management Office (2005), Change Management, *Eskom hr advance*, Edition 2, Nov/Dec 2005, pp. 43-44.

Eskom Change Management Office (31 May 2005). HR project leaders' seminar on the Eskom change management model. Powerpoint presentation.

Felkins, P.K., Chakiris, B.J. & Chakisis, K.N. (1993). Change Management: A model for effective organizational performance. Nature of Organizational Change.

Felkins, P.K., Chakiris, B.J. & Chakisis, K.N. (1993). Change Management: A model for effective organizational performance. Change Perspectives and Pragmatics.

Ferris, G.R., Fodor, D.B., Chachere, J.G. & Pondy, L.R. (1989). Myths and politics in organizational context. *Group and Organization Studies*, 14, pp. 82-103.

Frauenheim, Ed (2010). The Manager Question. *Workforce Management Journal.* Vol. 89, No. 4.

Goldkuhl G. & Cronholm, S. (2010). Adding theoretical grounding to grounded theory: Towards multi-grounded theory. *International Journal of Qualitative Methods*. Vol. 9, No. 2, pp. 185-205. University of Alberta.

Greener, T. & Hughes, M. (2006). Managing Change before Change Management. *Journal of Strategic Change,* 15, pp. 205-212. Brighton Business School, Brighton, UK.

Jackson, M.C. (2000). Systems Approaches to Management. New York: Kluver Academic/ Plenum Printers.

Kopelman, R.E., Brief, A.P. & Guzzo, R.A. (Eds.). (1990). The role of climate an (etis) culture in productivity. San Francisco, CA: Jossey-Bass.

Kuhn, T.S. (1970). The Structure of Scientific Revolutions. 2nd edition. Chicago: University of Chicago Press.

Kwahk, K.-Y. & Kim, H.-W. (2008). Managing readiness in enterprise systems-driven organizational change. *Behaviour & Information Technology Journal/ January-February*. Vol. 27, No. 1, pp. 79-87. Taylor

& Francis Ltd.

Lawler, E.E., III (1992). The ultimate advantage: Creating the high involvement organization. San Francisco: Jossey-Bass.

Leemann, J.E. (2010). Systems Thinking: Hope is not a Strategy for Change. Industrial Safety and Hygiene News.

Leonard-Barton, D. (1988). Implementation as mutual adaptation of technology and organization. Research Policy, 17, pp. 251-267.

Levy, A. (2000). Managing Organizational Change: Approaches, Techniques and Processes. Tel Aviv: Tcherikover Publishing (Hebrew).

Liu, X. & Batt, R. (2010). How Supervisors Influence Performance: A Multilevel Study of Coaching and Group Management in Technology-Mediated Services. *Personnel Psychology Journal*, 63, pp. 265-298. Cornell University, Ithaca, NY.

Lok, P., Westwood, R. & Crawford, J. (2005). Pereceptions of Organisational Subculture and their Significance for Organisational Learning. *International Review Journal for Applied Psychology.* Vol. 54, No. 4, pp. 490-514. Blackwell Publishing Limited, Oxford, UK and Malden, USA.

Maier, S. & Finger, M. (2001). Constraints to Organizational Change Processes regarding the Introduction of Organic Products: Case Findings from the Swiss Food Industry. *Business Strategy and the Environment (Wiley) Journal*, 10, pp. 89-99. John Wiley & Sons, Ltd and ERP Environment.

Martin, J. (1992). Cultures in organizations- Three perspectives. New York: Oxford University Press.

Melancon, D. (2007). Managing Change from the Top: Using Fact-Based Enforcement to support Change Management Policies. *The EDP Audit, Control and Security Newsletter.* Vol. 35, No. 6, pp. 19-24. Taylor & Francis Ltd, Philadelphia.

Mintzberg, H. (1983). Power in and around organizations. New York: Prentice-Hall.

Mowday, R.T., Porter, L.W. & Steers, R.M. (1981). Employee-Organizational Linkages: The Psychology of Employee Commitment, Absenteeism and Turnover, pp. 1-253. Academic Press, New York.

O'Reilly, C., Chatman, J., & Caldwell, D. (1991). People and organisational culture: A profile comparison approach to assessing person-organisation fit. Academy of Management Studies Journal.

Orlikowski, W.J. (1993). CASE tools as organizational change: investigating incremental and radical changes in systems development. *MIS Quarterly/ September*, Vol. 17, No. 3, pp. 309-340.

Peters, T. & Waterman, R. (1982). In search of excellence. Harper and Row, New York.

Pettigrew, A (1987). Context and action in the transformation of the firm. *Journal of Management Studies*. Sage Publications, London.

Rash, W. (2010). First, you need a Plan. (google article, viewed 09 February, 2010) <www.eweek.com/c/a/IT Management/For-Change-Management-First-You-Need-a-Plan/117147>.

Rieley, J.B. & Clarkson, I. (2001). The Impact of Change on Performance. *Journal of Change Management*. Vol. 2, No. 2, pp. 160-172. Henry Stewart Publications.

Robbins, S.P. (1990). Organisation theory: Structure Designs and Applications. Third edition. San Diego State University, New Jersey.

Robbins, S.P., Judge, T.A., Odendaal, A. & Roodt, G. (2009). Organisational behaviour- Global and Southern African perspectives. Second edition. Pearson Education, South Africa.

Ronza, P. (2009). Nonprofit compensation: To Pay or Not to Pay? *Nonprofit World publication/ September-October*. Vol. 27, No. 5, pp. 16-17. Canton, Michigan.

Rusaw, C. (2009). Professionalism under the "Performance-Based Pay" Reform: A Critical Assessment and Alternative Development Model. *Journal of Public Personal Management/ Winter*. Vol. 38, No. 4, pp. 35-49. Annandale, Virginia.

Saunders, I. & Barker, S. (2001). Organisational health: A framework for checking your organisation's

fitness for success. *Journal of Change Management.* Vol. 2, No.2, pp. 173-183. Henry Stewart Publications.

Sathe, V. & Davidson E.J. (2000). Toward a new Conceptualization of Culture Change. Handbook of Organizational Culture & Climate, pp. 279-296.

Schneidewind, U. (1998). The Corporation as an actor of Structural Policy. Metropolis: Marburg.

Shoham, S. & Perry, M. (2008). Knowledge Management as a Mechanism for Technological and Organizational Change Management in Israeli Universities. *Higher Education publication*, 57, pp. 27-246. Springer Science & Business Media B.V.

Stoddard, D.B. & Jarvenpaa, S.L. (1995). Business Process Redesign: Tactics for Managing Radical Change. *Journal of Management Information Systems/ Summer.* Vol. 12, No. 1, pp. 81-107. Harvard Business School.

Trice, H. & Beyer, J.M. (1993). The cultures of work organization. Prentice Hall, NJ.

van Vianen, A.E.M. (2000). Person-organisation fit: The match between newcomers' and recruiters' preferences for organisational cultures. Personnel Psychology Journal.

Venkatesh, V., Morris, M.G., Davis, G.B. & Davis, F.D. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, 27, pp. 425-478.

Walls, P., Parahoo, K. & Fleming, P. (2010). The role and place of knowledge and literature in grounded theory. *Nurse Researcher Journal*. Vol. 17, No. 4, pp. 8-15. RCN Publishing Company.

Worren, N.A.M., Ruddle, K. & Moore, K. (1999). From Organizational Development to Change Management: The Emergence of a New Profession. *Journal of Applied Behavioral Sciences*. Vol. 35, No. 3, pp. 273-286.

Wright, S. (2010). Taking charge of transformation. *Nursing Standard/ February.* Vol. 24, No. 22, pp. 20-22. RCN Publishing Company, London.

Yukl, G.A. (1989). Leadership in organizations. Prentice-Hall, New York.

ANNEXURES

Appendix 1: A manager's feedback on the questionnaire design

From: Sandy Dalgleish
To: Dudu Hadebe
Date: 2010/09/23 12:05 PM
Subject: Re: Assistance with research questionnaire
Attachments: Venue - PLCM Standardisation Workshop; PLCM Standardisation - Workshop 1- A genda and Guideline for Standardisation; PLCM Standardisation - Stakeholder List; PLCM Standardisation - Workshop 1- Agenda and Guideline for Standardisation

Hi Dudu,

Unfortunately I have limited knowledge ito the theory of change management, so I am going to accept that you have focussed on the Change Management principles to be followed as the basis of your questionnaire.

Section 5.
Q5.1: many peole actually do not know what the Eskom goals and Vision are, I would propose obtaining a copy of them and creating a one or two questions which specifically focus on the relevant ones i.e to change management.

Section 6.
Q6.2: "...same sentiments...", you need to add a question before this one focussing on whether the sentiments are positive/negative/neutral trying to relate to the OUTCOME after the change. Change "usually" has a negative sentiment whilst going through it.

You may want to create a small space for comments after each section if respondents would like to add something just after the section and not want to wait till end.

The problem is that the PLCM is again under discussion from Corporate perspective. Mike Murray is apparently with Christo Spammer to tun this into a 1-size fits all PLCM. So effectively Eskom's want to standards it even further ito of Process, probably Content and Governance and Definition. This was already attempted by Mike Murray as part of Eyethu, but it has been revived with the Creation of Group Capital Division.

Speak to Jurie and Alwyn if you want to know to what extent PLCM has changed as Tx has been doing a type of PLCM for many years back (we simply did not call it PLCM and we did not use the terms CRA,DRA,ERA,FRA). We simply have refined it as far as I now understand. These change have been relatively minor. eg we have always had a TDP (post CRA) and done Pre Engineering (post DRA) and done Execution (post ERA) so not much has changed in my view. we just said that we will do FINAL DESIGN before we go to ERA instead of after to increase scope and cost accuracy. I am pessimistic as the same people with the same skills will be doing the design. I am not anticipating huge benefits.

I have attached some email I have received from Mike Murray just for insight into where ESKOM is ito PLCM.

I have not been able to add much but I think your questionnaire attempts to answer the questions ito your framework.

All the best with the endeavour.

Regards

Sandy

Appendix 2: Informed Consent Letter

Dear Respondent,

M Com (Leadership Studies) Research Project

Researcher: Dudu Promise Hadebe (011-8003083)

Supervisors: Prof. Kriben Pillay & Ms Cecile Gerwel (031-2608300)

Research Office: Ms P Ximba 031-2603587

I, Dudu Promise Hadebe, an M Com Leadership Studies student, at the Centre for Leadership of the University of KwaZulu-Natal, hereby invite you to participate in a research project entitled "An Inquiry into Eskom Transmission's new Lifecycle Model Application and its Impact on Organisational Effectiveness". The aim of this study is to acquire personal knowledge in the discipline of change management.

Through your participation I hope to understand the change management principles that were applied in implementing the new lifecycle model within Eskom Transmission, and the impact this has had on the people "living" with the new model as well as Eskom Transmission's goals and vision. The results of the survey are intended to contribute to the analysis of the respondents' responses in order to identify the lessons learnt during the implementation of this project.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this survey. Confidentiality and anonymity of records identifying you as a participant will be maintained by the Leadership Centre, UKZN.

If you have any questions or concerns about completing the questionnaire or about participating in this study, you may contact me or my supervisor at the numbers listed above.

The survey should take you about **20** minutes to complete. I hope you will take the time to complete this survey.

Sincerely,

Dudu Hadebe

Investigator's   signature_____ Date_____

UNIVERSITY OF KWAZULU-NATAL

LEADERSHIP CENTRE

M Com (Leadership Studies) Research Project

Researcher: Dudu Promise Hadebe (011-8003083)

Supervisors: Prof. Kriben Pillay & Ms Cecile Gerwel (031-2608300)

Research Office: Ms P Ximba 031-2603587

<u>**CONSENT**</u>

I _____ (full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT: _____

DATE: _____

Appendix 3: Questionnaire

Section One - Profile

Please complete the following questions. Please mark appropriate answer with an X or a tick (√)

1.1   Work experience (in years)

0-2 ☐   >2-5 ☐   >5-10 ☐   >10-15 ☐   over 15 ☐

1.2   Gender

Male ☐ Female ☐

1.3   Type of Employment

Permanent ☐   Consultant/Contractor ☐

1.4   If you are a permanent Eskom employee, please select the type of service you provide to Eskom Transmission

Senior Management (incl. corporate specialist) ☐

Middle Management/ Senior & Chief Engineer ☐

Non-Management ☐

1.5   Please select the Eskom Division you work for or are rendering services to

System Operations and Planning ☐   Transmission ☐   Other ☐

Please complete **Sections Two to Seven** below. Each question, except the last, is rated on a five-point scale as follows:

Strongly Agree ☐   Agree ☐   Neutral ☐   Disagree ☐   Strongly Disagree ☐

The last question invites you to add any comments that are pertinent to the objectives of this research. There are no right or wrong answers. Please respond to each statement in an honest manner, based on your personal experience and general perception.

Section Two – Consultation & Implementation Process

2.1   During the planning stage of the lifecycle model, all relevant stakeholders (according to their influence on the project and its outcomes) were engaged.

Strongly Agree ☐   Agree ☐   Neutral ☐   Disagree ☐   Strongly Disagree ☐

2.2   I have attended a knowledge impartation workshop or clarification meetings, whereby during this time I have achieved full understanding of the model, prior to the model being fully rolled out.

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

2.3   I have been trained on how to apply the lifecycle model during project planning and/ or execution.

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

2.4   There are sufficient coaches who are experts on how to interpret and apply the new lifecycle model.

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

2.5   Below are my comments which I think may be pertinent to this section (leave blank or state NONE if none)

Section Three – Effect on people's performance, attitude towards the management, control mechanisms and inter-relationships between the Transmission departments

3.1   **Since the introduction of the new lifecycle model, I am more dedicated towards my work.**

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

3.2   **The new lifecycle model allows me to work more independently (provides adequate flexibility) to achieve the set organisation's objectives.**

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

3.3   **Since the implementation of the lifecycle model I enjoy working with the current management.**

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

3.4   **Eskom Transmission is well-organised to practice change management   with policies, procedures and routines.**

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

3.5   **Since the introduction of the lifecycle model, there is a reduction in direct supervision by management to meet the organisation's objectives.**

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

3.6   **The new lifecycle model is much more effective in facilitating easier and clearer (less ambiguous) interface with other Eskom Transmission departments.**

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

3.7   **Below are my comments which I think may be pertinent to this section (leave blank or state NONE if none).**

Section Four – Relations between Transmission management, employees and departments

4.1 The introduction of the new lifecycle model has improved the working relations between management of the affected departments e.g. due to better aligned project plans.

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

4.2 Since the implementation of the new lifecycle model, I have noticed synergy within teams in my department.

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

4.3 Since the implementation of the new lifecycle model, I have noticed synergy between inter-departmental teams.

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

4.4 The new lifecycle model has enabled more effective interactions between employees within the affected departments e.g. projects are now defined more adequately.

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

4.5 Below are my comments which I think may be pertinent to this section (leave blank or state NONE if none).

Section Five – Eskom Transmission goals and vision

5.1 **The new lifecycle model fosters an integrated approach/ work culture (between people from different departments) in deriving optimal solutions.**

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

5.2 **The new lifecycle model enables the implementation of optimal solutions which will be sustainable over a long (>10years) period of time.**

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

5.3 **With the introduction of the new lifecycle model it will be easier to recognise and reward outstanding performance.**

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

5.4 **I think that our client base will be more satisfied with the services rendered to them now that we are using the new lifecycle model.**

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

5.5 **Below are my comments which I think may be pertinent to this section (leave blank or state NONE if none).**

Section Six – Marketability to the rest of the Eskom divisional businesses

6.1   With the introduction of the new lifecycle model, there are more Eskom organization-wide benefits than risks.

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

6.2   Most of my colleagues have positive sentiments about the new lifecycle model.

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

6.3   Most of my colleagues share the same sentiments and understanding of the project lifecycle model.

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

6.4   I would recommend the roll out of the project lifecycle model across all the Eskom divisions.

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

6.5   Below are my comments which I think may be pertinent to this section (leave blank or state NONE if none).

Section Seven – General

7.1 The change management aspect of the lifecycle model was well managed within Eskom Transmission.

Strongly Agree ☐   Agree ☐   Neutral☐   Disagree ☐   Strongly Disagree ☐

7.2 The Project Lifecycle Model has been fully rolled out within Eskom Transmission.

Strongly Agree ☐   Agree ☐   Neutral ☐   Disagree ☐   Strongly Disagree ☐

7.3 Below are my comments which I think may be pertinent to this section (leave blank or state NONE if none).

Appendix 4: Ethical Clearance Letter

UNIVERSITY OF
KWAZULU-NATAL
University of KwaZulu-Natal
Research Office
Govan Mbeki Centre
Westville Campus
University Road
Chiltern Hills
Westville
3629
South Africa
Tel No: ~27 31 260 3587
Fax No: ~27 31 260 2584
E-mail : naidoot4@ukzn.ac.za

14 September 2010

Ms D P Hadebe
P O Box 2247
VRYHEID
3100

Dear Ms Hadebe

PROTOCOL: An Inquiry Into Eskom Transmission's new lifecycle model application and its
impact on organizational effectiveness
ETHICAL APPROVAL NUMBER: HSS/0994/2010 M: Faculty of Management Studies

In response to your application dated 03 September 2010, Student Number: 204523476 the
Humanities & Social Sciences Ethics Committee has considered the abovementioned
application and the protocol has been given FULL APPROVAL.

PLEASE NOTE: Research data should be securely stored in the school/department for a
period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Professor Steve Collings (Chair)
HUMANITIES & SOCIAL SCIENCES ETHICS COMMITTEE

SC/sn

cc: Prof. K Pillay (Supervisor)
cc: Mrs. C Haddon