

Transformation in the Civil Engineering Industry

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ABSTRACT

Transformation in the civil consulting engineering industry has been addressed, but there are still some shortcomings. This transformation is based on Broad-Based Black Economic Empowerment, Affirmative Action and Employment Equity.

- The main aim of Broad-Based Black Economic Empowerment is to redress historical inequalities in such a manner that it does not impact negatively on existing enterprises.
- The aim of Affirmative Action is to promote equal opportunity and fair treatment in employment through the elimination of unfair discrimination and the implementation of Affirmative Action measures. The aim is to redress the disadvantages in employment experienced by designated groups in order to ensure their equitable representation in all occupational categories and levels of the workforce.
- The main aim of Employment Equity is to promote equal opportunity and fair treatment in employment through the elimination of unfair discrimination and to redress the disadvantages in employment experienced by designated groups.

The existing drive to successfully implement transformation in the Civil Consulting Engineering Sector creates the opportunities for suitably qualified and experienced black engineering candidates to be selected for appointment above an equally qualified and experienced white candidate who applies for the same position. Although Civil Engineering as we know it in South Africa is only 105 years old, it has a rich history and contributed substantially to turning South Africa into a jewel and economic hub on the African continent.

The Civil Consulting Engineering Sector forms part of the Construction Sector and abides by the set of rules that has been compiled for the construction sector, known as the Construction Sector – Broad-Based Black Economic Charter – Version 6, 2006. This Construction Sector – Broad-Based Black Economic Charter – Version 6 is intended to assist all existing as well as any future businesses or stakeholders by providing a framework for the construction sector to address Broad-Based Black Economic Empowerment, enhance capacity and increase the productivity of the sector to meet world standard.

The Government's strategy or vision is to utilise Broad-Based Black Economic Empowerment as a tool to redress past inequalities and to broaden, expand and increase the country's economic base by including everybody that can participate in and contribute to the South African economy. The envisaged spin-offs from the implementation of this strategy by the Government would be to accelerate economic growth and this would then lead to job creation, and consequent poverty eradication.

The Government intends to achieve Broad-Based Black Economic Empowerment by making use of a balanced approach that includes contributions and measures that will mainly readdress ownership, control, employment equity, skills development, procurement, enterprise development and Corporate Social Development. This approach by Government will further address additional elements as indicated on the

Broad-Based Black Economic scorecard. Transformation in the Civil Consulting Engineering Sector is currently hampered by a shortage of suitably qualified and experienced black engineering candidates that can be employed in the Civil Consulting Engineering Sector.

The researcher is also employed in the Civil Consulting Engineering Sector and therefore experiences all the frustrations on a daily basis, which inspired this research to determine the status quo with regard to transformation in the Civil Consulting Engineering Sector.

Keywords: Transformation, Civil Consulting Engineering Industry, Broad-Based Black Economic Empowerment, Affirmative Action.

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LIST OF ACRONYMS

- AA - Affirmative Action
- BBBEE - Broad-Based Black Economic Empowerment
- CESA - Consulting Engineers South Africa (Previously known as SAACE)
- EE - Employment Equity
- HDI - Historically Disadvantaged Individual
- PDI - Previously Disadvantaged Individual
- SAACE - South African Association of Consulting Engineer's
- SMMEs - Small, Medium and Micro Enterprises

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1. CHAPTER 1 – INTRODUCTION

1.1 INTRODUCTION AND BACKGROUND

The Concise Oxford Dictionary (1992:1296) describes the term transformation as: "The act or an instance of transforming, the state of being transformed." It can therefore be said that transformation is an ongoing drive to change and transform from a current status to a desired status.

An influential black businessman and former politician once made a statement that compliments this mini-dissertation. This politician's name was Mr. Cyril Ramaphosa, and he said: "... we need more engineers...they are problem solvers..." (Lawless 2005:29).

During the centenary celebrations of the South African Institute of Civil Engineering (SAACE, now CESA) that was held in Cape Town in May 2003, the former State President (President Thabo Mbeki) addressed the audience. During his speech, one of the statements that he made was that civil engineering professionals are the modern-day thinkers, inventors and innovators, much like the great inventor and artist Leonardo da Vinci of the previous millennium. Former State President Thabo Mbeki further mentioned that engineering professionals are well-educated and trained to translate, transform, harmonise and integrate nature, materials, science and technology to provide a better sustainable quality of life for all of humankind (Botha 2004:123).

Former State President Thabo Mbeki mentioned that engineers work everywhere: banks, insurance, municipalities, provincial and central government, consultancies, parastatals, universities and technical universities, factories and research institutions, factories and industrial plants, businesses. Former State President Thabo Mbeki also mentioned that engineers are innovators, thinkers and doers (Botha 2004:127).

Botha mentions that after engineers have qualified for their first degree or diploma they often study to obtain engineering masters and doctoral degrees, or masters degrees in business administration and law (Botha 2004:127). He further mentions that engineers are writers of technical books, practical guidelines, specifications and conditions of contract. Engineers are everywhere. According to Botha they make a difference! (Botha 2004:127)

Botha (2004:123) indicates that the life of an engineer is mainly about investigating (not quick to give an answer), planning and design (always comparing different scenarios to ensure that the client gets the best fit for purpose and cost effective solution), building and maintaining sustainable infrastructure that can be used by everybody.

Botha (2004:123) highlights the importance of engineers and the role that they play in society by listing some projects that engineers are involved with on a daily basis. He specifically lists a few projects that ensure a more convenient lifestyle for all the citizens of different countries all over the world.

- Potable water projects to ensure health;
- Suitable and appropriate sanitation to ensure that people and nature is not harmed by waste products;
- Roads, railways, airports, harbours, waterways, foot- and cycle-paths, and cableways for getting people to work, to recreation, to school, to friends, to business in the country and worldwide;
- Tunnels, foundations, bridges, building and factory structures, pylons and towers for electrical lines and communication;
- Pipelines and conduits for conveying water, chemicals, petroleum;
- Electricity for lighting, cooking, driving our machines;
- Mineral extraction from the earth through mining operations, smelting, beneficiation and transforming, for example, metals and other raw materials into useful objects, coal into petroleum and chemicals;
- Motor vehicles, trains and ships and planes;
- Electronics that form the heart of appliances, computers and space ships;
- Agricultural systems to use on farms and to process foods.

Even though many more examples can be listed, one can derive from the projects listed above that without engineers the lifestyle of all citizens of earth would be very inconvenient.

Lawless (2000:7) provides an interesting comparison with regard to civil engineering. The following table compares the seven ancient wonders of the world with the seven modern wonders of the world:

Table 1.1 – Comparison of the wonders of the world

<u>Seven ancient wonders*:</u>	<u>Seven modern wonders*:</u>
The Pyramids of Egypt;	The Taj Mahal;
The Colossus of Rhodes;	The Easter Island statues;
The Hanging Gardens of Babylon;	The Great Wall of China;

The Mausoleum of Halicarnassus;	The Eiffel Tower;
The Pharos of Alexandria;	The Mayan city of Tikai;
The statue of Zeus at Olympia;	The Chartres Cathedral;
The Temple of Artemis at Ephesus.	The Space Shuttle.

*There seems to be no consensus on the exact seven wonders (Lawless 2000:7).

According to Lawless the most striking attributes of these ancient and modern wonders of the world is that:

- Firstly - they are all major civil engineering projects.
- Secondly - two of the seven ancient wonders are African projects.

Lawless (2000:7) also mentions that one of the ancient Southern African wonders is the Zimbabwe ruins. Lawless (2000:12) further mentions that two of the most influential civil engineers in politics are:

- Eduardo Frei Ruis-Tagle, who became the President of Chilli;
- Our own Minister of Finance - Trevor Manual;

Botha (2004:3) states that the history of Civil Engineering in South Africa may seem insignificant at a mere 105 years if compared to civil engineering in the civilised world. However, if one considers that an entire sub-continent was developed and made accessible through tremendous civil engineering input, especially over the last 100 years, it is deserving of acknowledgement and admiration.

History and heritage is the common property of all people (Botha 2004:3). History and heritage must be respected and valued, since the proud citizens of this country need to know where they come from to determine where they are going.

Engineering, specifically consulting engineering, forms part of the building sector. Civil Consulting Engineering forms part of Category 2 (Construction Sector – Broad-Based Black Economic Charter – Version 6 2006:14). The construction sector believes that positive and proactive response through the implementation of a Transformation Charter would address inequalities in the sector, unlock the sector’s potential and enhance its growth (Construction Sector – Broad-Based Black Economic Charter – Version 6 2006:3).

Lawless (2007: xi) explains Broad-Based Black Economic Empowerment Management (BBBEE) as follows: Codes of practice for Broad-Based Black Economic Empowerment have been

developed to ensure that transformation takes place at all levels and promotes black economic empowerment countrywide.

In South Africa's Economic Transformation: A Strategy for Broad-Based Black Economic Empowerment (2003:10) it is explained that the Government's approach was to situate black economic empowerment within the context of a broader national empowerment strategy that focused on historically disadvantaged people, and particularly black people, women, youth, the disabled, and rural communities.

This approach is also echoed in the Broad-Based Black Economic Empowerment Act (Act 53, 2003:4). This act states that, unless the context indicates otherwise:

- "black people" is a generic term which means Africans, Coloureds and Indians;
- "Broad-Based Black Economic Empowerment" means the economic empowerment of all black people including women, workers, youth, people with disabilities and people living in rural areas through diverse but integrated socio-economic strategies that include, but are not limited to:
 - increasing the number of black people that manage, own and control enterprises and productive assets;
 - facilitating ownership and management of enterprises and productive assets by communities, workers, cooperatives and other collective enterprises;
 - human resource and skills development;
 - achieving equitable representation in all occupational categories and levels in the workforce;
 - preferential procurement; and
 - investment in enterprises that are owned or managed by black people;

The seven main elements of Broad-Based Black Economic Empowerment as described by the Construction Sector Charter – Broad-Based Black Economic Charter – Version 6 (2006:8) are listed below:

- Ownership;
- Control;
- Employment Equity;
- Skills Development;
- Preferential Procurement;
- Enterprise Development;
- Residual (social investment initiatives).

The stakeholders involved with setting up the Construction Sector – Broad-Based Black Economic Charter – Version 6 (2006:8), all committed themselves to attain the objectives outlined in the respective elements listed above by applying the methods, mechanism and principles agreed.

These codes will encourage all entities, both public and private, to implement proper Broad-Based Black Economic Empowerment initiatives through the issuing of licenses, concessions, sale of assets and preferential procurement. Thus, the Codes of Good Practice provide a standard framework for the measurement of Broad-Based Black Economic Empowerment across all sectors of the economy.

South Africa requires an economy that can meet the needs of all our economic citizens – people and their enterprises – in a sustainable manner. This will only be possible if South Africa's economy builds on the full potential of all persons and communities across the length and breadth of this country. Government's objective is to achieve this vision of an adaptive economy characterised by growth, employment and equity by 2014. (South Africa's Economic Transformation: A Strategy for Broad-Based Black Economic Empowerment 2003:4)

Despite the economic successes and a broad range of state policy, strategy and programme interventions aimed at overcoming economic disparities, entrenched inequalities continue to characterise the economy and act as a deterrent to growth, economic development, employment creation and poverty eradication. Vast racial and gender inequalities in the distribution of and access to wealth, income, skills and employment persist. As a consequence, our economy continues to perform below its full potential. (South Africa's Economic Transformation: A Strategy for Broad-Based Black Economic Empowerment 2003:4).

The Broad-Based Black Economic Empowerment strategy is a necessary government intervention to address the systematic exclusion of the majority of South Africans from full participation in the economy. (South Africa's Economic Transformation: A Strategy for Broad-Based Black Economic Empowerment 2003:6).

1.2 PROBLEM STATEMENT

According to Lawless (2007:46) in 1921 the Transvaal Province initiated the development of a policy that later led South Africa to the shocking model of dividing the country's people, causing pain and damage to the black South Africans for almost a century. The Native Laws Amendment Act, 1937 (Act 34 of 1937), which was promulgated to control the flow of black people to towns, further entrenched the divide, and when the National Party came into power in 1948, the government of the day intensified its anti-urbanisation policy aimed at black people.

According to Lawless (2007:47) this drive by the government of the day led to the development of the non-independent homelands (also known as Bantustans) of Gazankulu, KaNgwane, KwaNdebele, KwaZulu, Lebowa and Qwaqwa. Lawless (2007:47) further indicates that it also led to the development of independent densely populated rural areas, namely Transkei, Bophuthatswana, Venda and Ciskei (referred to as the TBVC states). In most of these areas limited income and skills prevented their governments from undertaking mass development to offer formal housing, infrastructure and job opportunities (Lawless 2007:47).

Considering the above makes it easier to understand the interpretation of Apartheid according to South Africa's Economic Transformation: A Strategy for Broad-Based Black Economic Empowerment (2003:4) that the document states the interpretation that Apartheid systematically and purposefully restricted the majority of South Africans from meaningful participation in the economy. The assets of millions of people were directly and indirectly destroyed and access to skills and to self-employment was racially restricted. The accumulation process under Apartheid confined the creation of wealth to a racial minority and imposed underdevelopment on black communities. The result is an economic structure that today, in essence, still excludes the vast majority of South Africans. It is crucial as a nation to understand the magnitude of what took place in our past in order to understand why we need to act together as a nation to bring about an economic transformation in the interest of all.

The need for Affirmative Action and Broad-Based Black Economic Empowerment can now be explained by the fact that some citizens' ethnic background did not allow them to participate meaningfully in the economy under the previous government (i.e. before 1994).

While policies are drafted and implemented, the policy makers should bear in mind that citizens who were historically left out from meaningful participation in the economy, also have the right to equality, and they ought to be allowed to live and participate in the current economy according to their potential. If this intended process of economic participation by all South African citizens does not happen naturally, stricter policies will be required and will have to be implemented.

Therefore:

- The Government's Black Economic Empowerment Strategy aims to redress the inequalities that resulted from the systematic exclusion of the majority of South Africans from meaningful participation in the economy under the Government of the day (i.e. before 1994).
- All the citizens of this country have rights, but unfortunately in reality some people's circumstances did not allow them to previously (historically) enjoy their rights, and it therefore explains the need for Affirmative Action and Broad-Based Black Economic Empowerment.

- The Government's strategy for Black Empowerment Equity looks beyond the redress of past inequalities and rather aims to position Broad-Based Black Economic Empowerment as a tool to broaden the country's economic base by involving all the economically active citizens of this country and to accelerate growth, thus increasing job creation and helping with poverty-eradication. The Government aims to achieve this by making use of a balanced approach that includes contributions and measures that readdress ownership, management control, employment equity, preferential procurement, skills development, enterprise development, social-economic development and other residual elements of the Broad-Based Black Economic Empowerment scorecard.

Macleod (2007:2) highlights the fact that the shortage of engineering staff is a limitation on the sector's ability to deliver. Lawless (2005:8) confirms the limited number of suitably qualified female candidates that are available for employment in the Civil Consulting Engineering Sector.

The researcher would like to quote the following statement from Trueman Goba (2002:1), who is a black man who made things happen for himself by grasping every opportunity that was presented to him: "*... in training black engineers the numbers need increasing enormously. Lest there be some confusion, may I make my stance in this matter quite clear. My ideal is that the education and training engineers of my ethnic group and of either sex to perform engineering work wherever engineering work is required to be done, for the benefit of the community. We cannot produce sufficient engineers for the whole population when we are only recruiting students from one section of the population*".

Goba (2002:2) further states that he did not fully understand the implications of the severe under-resourcing in the South African education system for black people in particular, and how long this problem was going to continue. Goba (2002:2) also highlights the fact that there are many factors that had a negative effect impact on the availability of skilled people.

Amod (2006:3) concur that various factors lead to an increased demand in resources. Amod carries on by saying that if ever there was any doubt, SAICE's publication of the *Numbers and Needs* book heightened awareness that the human capital is our most precious commodity.

During the opening address at the Construction Transformation Charter Group, the Minister of Public Works, Ms. Stella Sigcau said that it is about true transformation of the Construction Sector and about true and meaningful empowerment as a precursor to growth and development (Sigcau, 2005). The Minister also said that it would be criminal to let the status quo continue and have the economic benefits of the construction industry accruing to and enjoyed by a few advantaged individuals and groups (Sigcau, 2005).

Although transformation has been addressed within the construction sector, it is clear that transformation must be further addressed (presumably in the Civil Consulting Engineering Sector as well).

1.3 AIM OF THE RESEARCH

It seems as though the Civil Consulting Engineering Sector is lagging behind when it comes to transformation. In an effort to address this, the objectives of this study are as follows:

The primary objective of this study is as follows:

- To determine the status quo with regard to transformation (BBBEE, AA and EE) within the civil consulting engineering firms that reside within the greater Pretoria area.

The secondary objective of this study is as follows:

- To determine what stumbling blocks, if any, exist that acts as a hindrance to transformation within the Civil Consulting Engineering firms that reside within the greater Pretoria area.

1.4 RESEARCH METHODOLOGY

Due to the investigative nature of this study, no hypothesis will be formulated. The study will focus on the requirements and aspects of transformation in the Civil Consulting Engineering Sector (for the companies that reside within the greater Pretoria area) in order to perform an evaluation of the status quo with regard to transformation within the Civil Consulting Engineering Sector (for the companies that reside within the greater Pretoria area), and to determine perceptions with regard to transformation amongst civil consulting engineering companies that resides within the greater Pretoria area. A questionnaire, of which the confidentiality was assured to all the respondents, was used to conduct the survey across shareholding, management, board of directors, executive and senior management, the company's personnel structure as well as perceptions to transformation.

The emphasis of this study will be to identify the status quo on transformation and the future planning with regards to transformation within Civil Consulting Engineering Sector, as well as the most prevalent perceptions on transformation amongst the companies targeted in the survey.

The questionnaire comprises three sections:

- The first section (A) will focus on the current status within the company.
- The second section (B) will focus on the future status of the company.
- The third section (C) will focus on the perceptions on transformation.

The researcher will compare the results (outcomes) from the questionnaires with the guidelines as set out in the construction transformation charter. The findings from the questionnaire will also be compared with the findings made from the literature study that will be undertaken by researcher. The comparison will focus on transformation requirements. The researcher will also attach the CESA 2008 report with references to this report.

1.5 LIMITATION ON THE STUDY

The limitations that existed for the researcher during his research were as follows:

- The availability of information with regard to transformation within the civil consulting engineering industry (Companies do not make this information readily available);
- The reluctance of companies to participate in the completion of the questionnaire;

For the abovementioned reasons the sample was limited to all the civil consulting engineering companies that is registered with CESA and that reside within the boundaries of the greater Pretoria area.

Transformation in South Africa is currently (2008) a very sensitive issue, especially taking the upcoming 2009 elections into account. The sensitivity towards this issue became even more apparent during the empirical study period. Please also refer to chapter 3 (point 3.3.3 – Determining of population size).

1.6 UNDERLYING ASSUMPTIONS

The researcher understands that the sensitivity surrounding transformation may have had an impact on the completion and submission (return) of the questionnaires that were distributed. It is the researcher's observation that many companies made only information available to the researcher that was regarded by them as not being too sensitive.

1.7 MINI-DISSERTATION CHAPTER OUTLAY

1.7.1 Chapter 1 – Introduction

Chapter 1 will provide background information on the need to focus on transformation within the civil engineering industry in order to indicate the necessity of the study. The researcher will also use this chapter and map out the problem statement and objectives of the study.

1.7.2 Chapter 2 – Transformation through Broad-Based Black Economic Empowerment, Employment Equity and Affirmative Action

Chapter 2 will reflect the literature review with an emphasis on transformation legislation within the Civil Consulting Engineering Sector. Issues that set the scene, as it currently is (the status quo) will include the Broad - Based Black Economic Empowerment (BBBEE), Employment Equity (EE), Affirmative Action (AA), globalization, skills shortage and transformation framework. The researcher will also use this chapter to map out the problem statement and objectives of the study.

1.7.3 Chapter 3 – Empirical Study and major findings

Chapter 3 will reflect and discuss the empirical study. The research design etc. will also be discussed in this chapter. This chapter will furthermore reflect the analysis and interpretation of the data.

1.7.4 Chapter 4 – Conclusions and recommendations

Chapter 4 will make conclusions and recommendations.

2. CHAPTER 2 – TRANSFORMATION IN THE CIVIL ENGINEERING INDUSTRY THROUGH BROAD-BASED BLACK ECONOMIC EMPOWERMENT, EMPLOYMENT EQUITY AND AFFIRMATIVE ACTION

2.1 INTRODUCTION

It is particularly important as far as the industry is concerned that the context wherein the study will be conducted is established. The rationale behind this is that all industries are at different stages of development with regard to transformation. This does not necessarily mean that there has been no effort in the Civil Consulting Engineering Sector or from companies within the Sector to embrace and implement transformation.

As citizens of South Africa we cannot turn our backs on the current developments and constraints within the Construction Sector, such as the inability or difficulty of companies to appoint suitably qualified black engineering candidates, the high number of professionally registered engineers, technologists and technicians that emigrate, the enormous pressure (workload) that currently exists within the engineering sector as well as the upcoming 2009 general elections. All these factors should be used to contextualize the current climate in South Africa, particularly with regard to transformation.

2.2 THE INDUSTRY

According to Lawless (2007:7) South African engineers have a proud tradition of engineering achievements. Major developments commenced in the early 19th century with the construction of water and sewerage networks in Cape Town, followed by pioneers Thomas Baines and George Pauling who developed significant road and rail networks throughout the country. From the late 1950's, strong engineering leaders, such as Solly Morris in Cape Town, Bill Pryce-Rosser in Johannesburg and Geoff Boden in Durban, planned and built road networks around their cities. These road networks were ahead of their time and have contributed to their cities' growth, showing long-term vision and insight rarely seen in today's thinking.

Lawless (2007:8) argues that the result of good engineering was that South Africa became the economic leader in Africa. Mineral wealth, First World economic infrastructure and associated skills have allowed the country to develop into the powerful country that it is today generating a GDP per capita several orders of magnitude larger than most other countries on the continent.

Consulting engineering plays a very important role in the private and public sectors in developing infrastructure, cities etc. and consequently contributes to the economies of all countries.

Consulting engineers provide valuable technology-based professional services to municipalities, to the state, national and provincial governments and to various other clients as well.

The CESA - State of the South African Consulting Engineering Profession in South Africa (January – June 2008) reports that the demand for engineers and technologists remain high, yet the availability of the technical personnel remains scarce, thus making it increasingly difficult to fill engineering and technological vacancies. The table below reflects the % of firms wanting to increase staff, thus reflecting the demand in the industry.

Table 2.1: Percentage (%) of firms wanting to increase staff, by type of personnel

Type of personnel	% of firms wanting to increase staff – December 2005	% of firms wanting to increase staff – June 2006	% of firms wanting to increase staff – December 2006	% of firms wanting to increase staff – June 2007	% of firms wanting to increase staff – December 2007	% of firms wanting to increase staff – June 2008
Engineers	76.5	92.1	93.5	91.2	94.5	67.4
Technologists	83.9	87.8	91.3	88.6	90.6	67.1
Technicians	58.2	80.8	80.8	89.2	89.4	43.0
Other technical staff	73.9	56.2	55.2	59.9	52.1	40.06
Support Staff	23.5	24.0	25.2	26.5	28.7	18.5

*Source: CESA - State of the South African Consulting Engineering Profession in South Africa-January – June 2008 (2008:10).

2.3 DEFINITIONS AND BRIEF DESCRIPTION OF MAJOR CONCEPTS

2.3.1 Broad-Based Black Economic Empowerment (BBBEE)

According to Stebbing (2008:3) the problem that currently (in 2008) exists is that almost a hundred percent of black owned businesses have discovered to their dismay that they can lose business to more empowered companies.

Stebbing (2008:5) asks the question: Who is black? Stebbing then answers that this is probably one of the most important questions in terms of BEE, and the answer is not as obvious as many people think. A person is only black if he/she is African, Coloured, or Indian. A black person must also be a South African citizen.

Stebbing (2008,:5) further asks the question of whether it matters when the black person became a South African citizen? Stebbing answers the question by stating that according to the Codes you may only be counted as a black person:

- If you are South African by birth or descent, or
- Became a citizen by naturalization before the new constitution started on 27 April 1994, or
- Only became a naturalized citizen after the new constitution commenced because of Apartheid restrictions.

Stebbing (2008:5) states that the Codes do not count black people from other African or Southern African nations (Lesotho, Swaziland and Nigeria) as being black for the purpose of BEE. This therefore entails that only people who fit the definition of a black person as described above can help your firm with compliance (i.e. it is therefore of no use whatsoever to employ Zimbabweans or for that matter person from another African state to help your company to achieve compliance).

In South Africa the Department of Labour monitors companies that operate within the borders of South Africa with regard to compliance with legislation. The Department of labour monitors the compliance of companies (which is not exempted from filing returns) with regard to black management, Employment Equity and skills development via Employment Equity plans that must be completed and submitted to the department of labour on a regular basis.

On its part the Department of Trade and Industry monitors Black Economic Empowerment (BEE) through the implementation of the Codes of Good Practice. The purpose of the Codes of Good Practice is to assist and advise both the public and private sectors in their implementation of the objectives of the Broad-based Black Economic Empowerment (Broad-Based BEE) Act. The Codes of Good Practice provide principles and guidelines that would facilitate and accelerate the implementation of Broad-Based Black Economic Empowerment in a meaningful and sustainable manner.

The Department of Trade and Industry has also developed an interpretative guide as an aid for BEE practitioners seeking to gain further clarity and understanding of the Codes of Good Practice “the Codes” (Broad-Based Black Economic Empowerment Act – The Codes of Good Practice – Interpretive Guide June 2007.

The shortcomings of Narrow-Based Black Economic Empowerment (BEE) can be explained by the fact that BEE only looked at the empowerment of black people and only in the areas of Ownership and Management. BEE has now been replaced with Broad-Based Black Economic Empowerment (BBBEE) that looks at the economic empowerment of all black

people including women, workers, youth, people with disabilities and people living in rural areas through diverse but integrated socio-economic strategies such as: Ownership, Management, Employment Equity, Skills Development, Preferential Procurement, Enterprise Development and Corporate Social Investment/ Residual/ Industry Specific.

When the shortcomings (companies doing window dressing by having a Black ownership in their company, but the Black people with ownership had no say or decision making powers) of narrow-based black economic empowerment (BEE) became apparent towards the end of the nineteen-nineties, a need emerged for a more inclusive approach to empowerment, which would begin to narrow the divide between the first and second economies by putting mechanisms in place to accelerate the entry of black people into the first economy. This approach became known as Broad-Based Black Economic Empowerment (Broad-Based Black Economic Empowerment Act – The Codes of Good Practice – Interpretive Guide June 2007:8).

The Construction Sector Broad-Based Black Economic Empowerment Charter – Version 6 – Final, 2006:22) defines BBBEE as: The economic empowerment of all black people including women, workers, youth, people with disabilities and people living in rural areas through diverse but integrated socio-economic strategies that include, but are not limited to –

- Increasing the number of black people that manage, own and control enterprises and productive assets;
- Facilitating ownership and management of enterprises and productive assets by communities, workers, co-operatives and other collective enterprises;
- Targeted procurement; and investment enterprises that are owned or managed by black people;
- Human resource and skills development;
- Achieving equitable representation in all occupational categories and at all levels in the workforce;
- Facilitating the provision of additional skills to black employees at all levels in the workforce.

Kovacevic (2007) states that the Broad-Based Black Economic Empowerment Bill strives for the effective participation of black people in the economy in order to achieve the economic unity of the nation. Although the professed aims of Black Economic Empowerment (BEE) are noble, the program has achieved little success in eradicating poverty, increasing employment, or fostering overall economic growth. Whether the new legislation is government-sponsored discrimination or rightful redress of Apartheid injustice, remains a matter of controversy. What is clear is that the initiative is an inadequate approach to extending prosperity. The

unfortunate result is the displacement of one elite in favour of another; as income disparity within the black population widens.

Kovacevic (2007) also states that BEE is based on redistribution according to race rather than wealth or income. Businesses are expected to fulfil rigorous race quotas in a quest for a demographically representative staff. Redistribution legislation has made it more difficult for skilled white workers to find employment domestically, resulting in an outflow of skill. Between 1994 and 2001, the percentage of enterprises that perceived the emigration of skilled human resources as "significant" rose from 2 percent to 33 percent. This disturbing skills shortage in many sectors of the economy is accompanied by slow economic growth rates that barely keep pace with population growth.

2.3.2 Employment Equity

According to the South Africa's Economic Transformation: A Strategy for Broad-Based Black Economic Empowerment (2003:6) the second important law introduced in 1998 was the Employment Equity Act. This act outlawed all forms of unfair discrimination at work, and required all enterprises employing more than fifty employees to take Affirmative Action to bring about a representative spread of designated groups in all occupations and organisational levels within defined time periods.

South Africa's Economic Transformation: A Strategy for Broad-Based Black Economic Empowerment (2003:21) states that this component of the scorecard focuses on the development of the employees of an enterprise or sector as well as employment equity. Enterprises are required to comply with the provisions of the Employment Equity Act to bring about an equitable representation of black persons in all occupations and at all levels of the organisation over a period of time. The involvement of black persons in operational, professional cadres and executive decision-making is a critical aspect of BEE. Given the legacy of systematic labour market discrimination and inferior education, accelerated skills and advanced professional skill development is also important.

Code 000: Broad-Based Black Economic Empowerment framework – statement 000: principles and definitions of Broad-Based Black Economic Empowerment (2004:15) explains Employment Equity as a mechanism used to achieve equity in the workplace by:

- Promoting equal opportunity and fair treatment in employment through the elimination of unfair discrimination, and
- Implementing Affirmative Action measures to redress the disadvantages in employment experienced by black people, in order to ensure their equitable representation in all occupational categories and levels in the workplace.

Entities are required to comply with the spirit and the provisions of the Employment Equity Act to bring about an equitable representation of black persons at all occupational and skills levels in organisations over a period of time. The underlying principle behind employment equity is to foster the active involvement of black people in the operational, professional and executive decision-making processes in their employing entities. The series of statements in Code 300 of the Code of Good Practice outline the various criteria to be applied in determining the level of employment equity of the enterprise.

2.3.3 Affirmative Action

There are many different definitions and interpretations for Affirmative Action. The definition offered by the Black Management Forum (1993,op.cit.) is quite appropriate for this particular study and it reads as follows: “Affirmative Action is a planned and positive process and strategy aimed at transforming socio-economic environments that have excluded individuals from disadvantaged groups, in order for such disadvantaged individuals to gain access to opportunities, including developmental opportunities, based on their suitability”.

Adam, K (2000) argues that Affirmative Action in South Africa's case also needs to be viewed in relation to the Apartheid society's degree of illegitimacy. In Apartheid South Africa, the absolute unquestioning nature of discrimination prevailed.

Mkhwanazi, D (1993) states that in South Africa the moral imperative views Affirmative Action as a necessary instrument of change to influence social and economic equality that impacts on the development of blacks. Affirmative Action is rationalized in business terms for reasons other than moral concern, and calls for a new breed of managers to reflect equitable corporate demographics.

Bendix (2001:435) refers to Affirmative Action as the purposeful and planned placement or development of competent, or potentially competent, persons in, or to, positions from which they were debarred in the past, in an attempt to redress past disadvantages and to render the workforce more representative of the population.

According to Walker (1993) when one is considering government intervention to regulate labour markets, it appears that business leaders are generally un-accepting of such intervention.

Affirmative Portfolios (www.affirm.co.za, date accessed 18 September 2008) describes Affirmative Actions as a planned process and strategy aimed at transforming the socio-economic environment in order to create access to opportunities for the disadvantaged, based on their suitability, resulting in successful organisation and a growing economy. Furthermore, Affirmative Action is a strategy designed to correct past imbalances and previous

discrimination of B.I.C candidates/disabled in the HR Industry, particular to Recruitment/Personnel. According to Jain (1999) little progress is made by employers to redress historical inequalities in the workplace without government intervention in the form of employment equity legislation.

The purpose of the Act (Employment Equity Act 55 of 1998) is to achieve equity in the workplace, by:

- Promoting equal opportunity and fair treatment in employment through the elimination of unfair discrimination; and
- Implementing Affirmative Action measures to redress the disadvantages in employment experienced by designated groups, to ensure their equitable representation in all occupational categories and levels in the workforce.
- One of the points in the Employment Equity Act (Act 55 of 1998:7) with regard to prohibition of unfair discrimination has special relevance to this study:
- It is not unfair discrimination to:
 - take Affirmative Action measures consistent with the purpose of this Act; or
 - distinguish, exclude or prefer any person on the basis of an inherent requirement of a job.

The researcher further concludes that the Affirmative Action Act was promulgated to ensure that qualified people from designated groups have equal opportunities to secure employment. The researcher further concludes that Affirmative Action measures are measures designed to ensure that suitably qualified people from designated groups have equal employment opportunities and are equitably represented in all occupational categories and levels in the workforce of a designated employer.

2.4 THE ELEMENTS OF BROAD-BASED BLACK ECONOMIC EMPOWERMENT ENSURING AND HELPING WITH THE IMPLEMENTATION OF TRANSFORMATION

2.4.1 Ownership

Williams et al (2005) argues that since the demise of Apartheid in South Africa, corporations have been encouraged to participate in the governmental goal of increasing corporate ownership by the black majority population. One vehicle that has arisen to help facilitate an increase in corporate ownership has been black economic empowerment (BEE) transactions. BEE transactions are essentially private placements of equity. Firms that have taken this socially activist position of selling portions of their equity, usually at a substantial discount, to black empowerment groups have received positive media attention in the name of “good corporate citizenship.”

Despite significant progress since the establishment of a democratic government in 1994, South African society is characterised by racially based income and social service inequalities. Consequently the vast majority of South Africans remain excluded from ownership, control and management of productive assets and from access to training in strategic skills (Construction Charter Version 6-Final -2006:3).

According to the South Africa's Economic Transformation: A Strategy for Broad-Based Black Economic Empowerment (2003:11) the strategy for BBBEE is underpinned by four key principles:

1. Black Economic Empowerment is broad-based.

Societies that are characterised by racial or ethnically defined wealth disparities are not likely to be socially and politically stable. The process of BEE seeks to accelerate the deracialisation of the South African economy and fast track the re-entry of historically marginalised communities into the mainstream of the economy.

2. Black Economic Empowerment is an inclusive process.

A more equitable economy will benefit all South Africans, individuals and enterprises. The process of BEE is an inclusive one, and all enterprises operating within South Africa can, and indeed should, participate in this process. This strategy will be implemented throughout all sectors of the economy and is not limited only to those enterprises that derive income from government procurement or those where the sector is regulated by government.

3. Black Economic Empowerment is associated with good governance.

A fundamental part of our economic reform and transformation is improving the quality and transparency of all economic activity. Accordingly, BEE must be associated with and ensure the highest standards of corporate governance. Concerted efforts will be made to ensure that the quality of corporate boards and governance is improved.

4. Black Economic Empowerment is part of our growth strategy.

- Economic growth, development and BEE are complementary and related processes. Government's approach is that BEE must be an inclusive process and not an exclusive process. No economy can grow by excluding any part of its people, and an economy that is not growing cannot integrate all of its citizens in a meaningful way. As such this strategy stresses a BEE process that is associated with growth, development and enterprise development, and not merely the redistribution of existing wealth.
- New, inclusive patterns of wealth accumulation must come from both existing economic activity and new economic activity. Thus we need higher levels of investment that generates a substantial amount of new economic activities. At the same time, ownership patterns must change.

- An effective and successful process of BEE and accelerated economic growth are mutually reinforcing objectives. The absence of shared economic growth will continue to generate a lower rate of growth, as it will continue to restrict levels of demand in the economy, in turn reducing the multiplier effects of investment and the accelerator effects of higher levels of domestic consumption.
- The deracialisation of our economy is geared towards enhancing the economic growth of the country. In accordance with this principle, BEE will be pursued in such a way as to ensure that where ownership is transferred the proceeds from the sale of assets are reinvested in the South African economy.
- In order to grow our economy, more enterprises are needed to produce value-added goods and services, to attract investment, to employ more of our people in productive activities. A core component of the BEE strategy is therefore the creation and nurturing of new enterprises undertaking new forms of economic and value-adding activities. We seek in BEE a new vitality in our economy by facilitating new entrants to all aspects of the economy.

According to the South Africa's Economic Transformation: A Strategy for Broad-Based Black Economic Empowerment (2003:25), the following categories of BEE enterprises are proposed as a guide to enable preferencing and targeted support, especially in the area of Government procurement. These would form the basis of a code of practice:

- A black enterprise is one that is 50,1% owned by black persons and where there is substantial management control.
 - Ownership refers to economic interests (i.e. the authority and power to manage assets, determine policies and direction of company operations).
 - Management refers to membership of any board or similar governing body (i.e. to executive directors, senior management, middle management and junior management).
- A black empowered enterprise is one that is at least 25,1% owned by a black person and where there is substantial management control.
- A black woman-owned enterprise is one with at least 25,1% representation of black women within the black equity and management portion.
- A community or broad-based enterprise has an empowerment shareholder group who represents a broad base of members such as a local community or where the benefits support a target group for example black women, people with disabilities, the youth and workers.
- A cooperative or collective enterprise is an autonomous association of persons who voluntarily join together to meet their economic, social and cultural needs and

aspirations through the formation of a jointly-owned and democratically controlled enterprise.

- Ownership refers to economic interests (i.e. the authority and power to manage assets, determine policies and direction of company operations).
- Management refers to membership of any board or similar governing body (i.e. to executive directors, senior management, middle management and junior management).

2.4.2 Skills Development

Lawless (2007:17) explains skills gap versus skills shortage. Lawless further (2007:17) claims that business indicates that there is a massive skills shortage, which is slowing growth. On the other hand there are people that deny the skill shortage, citing the large number of graduates who are unable to find employment. Lawless (2007:17) explains that the answer lies in understanding the difference between skills shortage, that is, scarce skills not being available at all, and skills gap that occur where there are qualified people who do not have the appropriate level of experience required for specific posts.

In the Construction Sector Broad-Based Black Economic Empowerment Charter (Construction Sector Broad-Based Black Economic Empowerment Charter – Version 6 – Final, 2006:4) it is claimed that there is a depleted skills base due to a number of factors including the disconnection of academia from the needs of the sector, the sector's lack of appeal as a career choice, the low numbers of school leavers with adequate grades in Mathematics and Science, low salaries and poor prospects for career advancement.

The Construction Sector Broad-Based Black Economic Empowerment Charter (Construction Sector Broad-Based Black Economic Empowerment Charter – Version 6 – Final, 2006:10) reflects that the construction sector consists of a large low-skilled labour force and limited numbers of highly skilled professionals, which are in short supply. Despite this, enterprises are not adequately investing in skills development.

Consequently, enterprises in the sector commit to achieve the following targets:

- 1.5% of payroll per annum on skills development;
- 70% of total skills development spent on black people;
- 25% of skills development spent on black people goes to black women;
- 25% of skills development spent on black people goes to black management;
- 20% of skills development spent on black management goes to black women management;

- 2.5% (1.5% for BEPs) of employees on learnerships calculated as a rolling 12 month average;
- 70% of Total learnerships on black people;
- 35% of Learnerships on black people must be black women;
- 30% of Learnerships on black people must be from designated groups; and
- 0.3% of payroll on bursary expenditure on black students.

2.4.3 Procurement

South Africa's Economic Transformation: A Strategy for Broad-Based Black Economic Empowerment (2003:15) describes preferential procurement as an effective instrument to promote BEE in our economy. Government is reviewing its preferential procurement policy in order to enhance its impact on BEE. Clear targets will be set to increase the levels of preference to black-owned and black-empowered enterprises. The final target will be set once research on existing levels of black empowerment procurement has been completed. In support of increased procurement by black-owned firms, government will expand its supplier development programmes to ensure that more black enterprises are created and are able to meet the requirements of purchasers in the public sector. The enabling legislation on BEE will provide that all government departments, state-owned enterprises and public agencies must take into account any code of practice issues in terms of the legislation in determining and implementing their preferential procurement policy.

In the Construction Sector Broad-Based Black Economic Empowerment Charter (Construction Sector Broad-Based Black Economic Empowerment Charter – Version 6 – Final, 2006:11) it is claimed that to date the sector has not effectively implemented preferential procurement practices. In the Construction Sector Broad-Based Black Economic Empowerment Charter – Version 6 – Final, 2006, 12) commits all the enterprises in the sector to achieve a weighted target of procurement spent by BBBEE suppliers of 70% by Dec 2013 (in five years):

- In addition to the targets, the parties to the charter undertake to:
- Develop and implement targeted procurement policies, including promoting accessibility of tendering opportunities, early payment cycles and other supply side interventions for micro and small enterprises;
- Implement mechanisms to counter fronting and the abuse of targeting arrangements;
- Promote compliance to the Broad Based Black Economic Empowerment Act amongst their suppliers by assessing the supplier in terms of their relevant sector charters where these exist as codes of good practice and in terms of the generic scorecard where they do not; and

- Enhance benefits to local communities, target, where appropriate, procurement from local enterprises, specifically micro and small enterprises with black ownership exceeding 50%.

In the Construction Sector Broad-Based Black Economic Empowerment Charter (Construction Sector Broad-Based Black Economic Empowerment Charter – Version 6 – Final, 2006:12) it is reflected that the procurement from suppliers of goods and services should be measured against the following matrix:

Table 2.2 – Contributor Rating Level

BBBEE Status	Qualifications (Points on Generic Scorecard)	BEE Procurement recognition level
Level 1 Contributor	> 100 Points	135% (e.g. R 1.00 = R 1.35)
Level 2 Contributor	85 to 100 Points	125% (e.g. R 1.00 = R 1.25)
Level 3 Contributor	75 to 85 Points	110% (e.g. R 1.00 = R 1.10)
Level 4 Contributor	65 to 75 Points	100% (e.g. R 1.00 = R 1.00)
Level 5 Contributor	55 to 65 Points	80% (e.g. R 1.00 = R 0.80)
Level 6 Contributor	40 to 45 Points	60% (e.g. R 1.00 = R 0.60)
Level 7 Contributor	40 to 45 Points	50% (e.g. R 1.00 = R 0.50)
Level 8 Contributor	30 to 40 Points	10% (e.g. R 1.00 = R 0.10)
Level 9	< 30 Points	0% (e.g. R 1.00 = R 0.00)
Where any enterprise is in excess of 50% owned by black people, BBBEE status of that enterprise will be at the level immediately above the level at which its actual score is evaluated.		

*(Source: Construction Sector Broad-Based Black Economic Empowerment Charter – Version 6 – Final 2006, 12.)

The BBBEE status of an enterprise must be raised to the next highest BBBEE status level than the level at which was evaluated, when:

- black people hold more than 50% of the exercisable voting rights and more than 50% of the economic interest in that enterprise; and
- when the enterprise has achieved the full seven points under the net equity interest component of the ownership scorecard.

For example: if a company was evaluated and the company managed to achieve a score of 68 points, this will mean that this company will be a level 4 contributor. When a company complies with the two points raised above, the company will then be raised to a level 3 contributor.

2.4.4 Enterprise Development

South Africa's Economic Transformation: A Strategy for Broad-Based Black Economic Empowerment (2003:22) indicates that a second element of indirect empowerment is enterprise development. This can take two forms:

- Investment in black-owned and black-empowered enterprises,
- Joint ventures with black-owned and black-empowered enterprises that result in substantive skills transfer.

Investment in black-owned and black-empowered enterprises is a crucial step in the provision of financial and intellectual capital to such enterprises. The key elements to be taken into account when making these types of investment are that there must be real economic benefit flowing to the recipient enterprise to enable it to be set up and run on a sustainable basis; effectively there must be resultant operational capacity from the investment into the enterprise; and, there must be active participation by black people in the recipient enterprise.

Joint ventures with black enterprises may involve processes such as outsourcing parts of the established enterprise's projects or jointly contracting for certain projects that will result in a transfer of skills to the black enterprise. The measure of the effectiveness of joint ventures is whether or not the black enterprise are able to perform the core elements of the joint projects on a stand-alone basis without compromising the competitive advantage contributed by either enterprise.

Black African people must be included in all aspects of the economy in an equitable inclusive manner to ensure sustainable growth. Previous painful and deliberate policies of colonialism and Apartheid under the previous dispensation disempowered, marginalized and excluded black Africans from playing a key role in the economy of their own country. The BBBEE strategy is at the centre of transformation strategy. The aforementioned strategy seeks to redress the imbalances of the past by distributing ownership, management and control of the country's economic resources to the majority of citizens (designated groups) and to ensure broader and more meaningful participation in the economy by black Africans. The success of this endeavour/attempt is required to achieve sustainable development and prosperity for all.

Due to a lack of financial capacity amongst black South Africans, financial institutions, the private sector and the Government has important roles to play (contributions to make) to assist black South Africans to acquire assets.

BBBEE can only be successfully implemented if all the parties involved "buy" into the process. The approach should be to promote mainstreaming of black South Africans in all levels of the building sector and the redressing of historical and social inequalities will be approached in a

manner that should not and must not have a negative impact on any successful existing enterprise. The aim is to help successful existing enterprises to grow and expand even further. Affirmative Action measures are intended to ensure that suitably qualified employees from designated groups have equal employment opportunity and that they are also represented in all occupational categories and levels of the workforce.

Such measures must include:

- Identification and elimination of barriers with an adverse impact on designated groups;
- Measures which promote diversity;
- Making reasonable accommodation for people from designated groups;
- Retention, development and training of designated groups (including skills development); and
- Preferential treatment and numerical goals to ensure equitable representation. This excludes quotas.

Designated employers are not required to take any decision regarding an employment policy or practice that would establish an absolute barrier to prospective or continued employment or advancement of people not from designated groups.

A designated employer must prepare (design) and implement a plan to achieve employment equity, which must:

- Have objectives for each year of the plan;
- Include Affirmative Action measures;
- Have numerical goals for achieving equitable representation;
- Have a timetable for each year;
- Have internal monitoring and evaluation procedures, including internal dispute resolution mechanisms; and
- Identify persons, including senior managers, to monitor and implement the plan.

2.5 EMPLOYMENT EQUITY

The Employment Equity Act (1998:2) states that in order to provide for employment equity as well as for matters related to it resulting from Apartheid and other discriminatory laws and practices, there currently exist disparities in employment, occupation and income within the national labour market. These disparities create such pronounced disadvantages for certain categories of people that they cannot be redressed by simply repealing discriminatory laws.

The researcher further derives that according to the scope of the Employment Equity Act (1998) designated employers and their employees should apply the guidelines as set out in this code to develop their own employment equity plan, taking into account the specific circumstances of their own organisations. The purpose and rationale is therefore that the plan should reflect the designated employer's employment equity implementation programme and that the plan represents the critical link between the current workforce profile and possible barriers in employment policies and procedures. It must also reflect the implementation of remedial steps to ultimately result in employment equity in the workplace, in this way eliminating unfair discrimination; promote equitable representation from designated groups by means of Affirmative Action measures.

There is no rigid format for an Employment Equity Plan, and the act allows employers to customize the plan to suit their own needs.

Booyesen (2007:8) argues that Employment Equity implementation needs to be supported by coherent employment practice strategies focusing on human capital development, inclusive practices and organizational culture change.

Every designated employer (50 or more people) is required to draw-up and implement an employment Equity plan.

The purpose of the employment Equity plan is:

- To enable the employer "to achieve reasonable progress towards employment Equity";
- To eliminate unfair discrimination in the workplace;
- To achieve equitable representation of employees from designated groups by means of Affirmative Action measures.

The following points must be addressed in an employment equity plan:

- Have objectives for each year of the plan;
- Include Affirmative Action measures;
- Have numerical goals for achieving equitable representation;
- Have a timetable for each year;
- Have internal monitoring and evaluation procedures, including internal dispute resolution mechanisms; and; Identify persons,
- Including senior managers, to monitor and implement the plan.

An employment Equity plan therefore must clearly set out the steps that the employer plans to follow to achieve these objectives. Employment Equity and Affirmative Action applies to all designated employers and their employees, particularly those employees from designated groups.

Every employer should be in possession of at least two documents - the Code of Good Practice and the User Guide. No rigid format exists for an employment Equity plan, and the act allows employers to customize the plan to suit their own (company specific) needs.

The employment equity therefore aims to:

- Promote the constitutional right of equality and the exercise of true democracy;
- Eliminate unfair discrimination in employment;
- Ensure the implementation of employment equity to redress the effects of discrimination;
- Achieve a diverse workforce broadly representative of black people;
- Promote economic development and efficiency in the workforce.

2.6 CONCLUSION

The main concepts relating to transformation have been addressed and explained in this chapter. These main concepts are: Broad-Based Black Economic Empowerment (BBBEE), Affirmative Action and employment equity. The researcher would like to delineate an approach to the definitions, measurements and requirements as set-out for transformation through BBBEE, AA and EE. In order to redress the imbalances of the past (restrictions to economic participation under the previous dispensation) the government of the day has the authority to draft and implement legislation to affect transformation in the South African economy.

The government has the power and the authority to force transformation onto the Civil Consulting Engineering industry (or any other industry within the South African economy), but this might do more damage than good, and such a move can be detrimental to the sector and the economy. One must also bear in mind that the Government is under immense pressure from the people who elected them into power to make use of the method described above (i.e. forcing transformation). Despite the pressure, Government is extending a hand to the private sector to rather help the Government to increase its delivery capability by forming partnerships with the private sector.

The construction sector (of which the Civil Consulting Engineering Sector forms part off) is currently one of the fastest growing sectors in the South African economy due to the massive investment by Government in the upgrading of existing infrastructure as well as new infrastructure development. It is of utmost importance that the Civil Consulting Engineering Sector (as well as all the firms within this sector) really tries to do more to address transformation where it has not been adequately addressed.

The researcher will use the findings from the empirical study in the next chapter (chapter 3) and later on compare the findings from chapter 3 with the findings from this chapter (chapter 2).

3. CHAPTER 3 – EMPIRICAL STUDY

3.1 INTRODUCTION

The researcher will use this chapter to elaborate on the composition of the questionnaire, the findings based on the data received from the questionnaires and also reflect the areas that should still be further addressed by the consulting engineering companies that resides within the greater Pretoria area.

The process of BBBEE is an inclusive process and all enterprises operating in South Africa can and should participate and work together to advance this process. This study will reveal whether the consulting engineering industry complies with the Government's black economic empowerment strategy and with the construction sector empowerment framework.

The relatively small number of suitably qualified black employees that are professionally registered engineers (with adequate years of experience) seems to be one of the major factors affecting the ability of blacks to enter the civil engineering industry. Access to finance (required for buying shares in consulting engineering companies) seems to be another factor affecting the ability of black people to enter the civil engineering industry. These two examples can be seen as two of the major barriers preventing real black empowerment. These aspects are currently the major source of frustration for many blacks and should be addressed as a priority.

According to the researcher the Government can consider the following in an attempt to address these problems:

- The educational system should be addressed as a matter of urgency.
- Special attention must be paid to the promotion of mathematics and science at school level.
- Scholars (especially black scholars) must be encouraged to take mathematics and science on higher grade at high school level.
- The government must urgently address the shortage of qualified mathematics and science teachers.

Economic transformation in South Africa's economy is part of the broader agenda to redress the inequalities of the past in the Constitution. With this means to an end the Government has introduced legislation and policies that aim to address the challenges that currently exist. Broad-Based Black Economic Empowerment (BBBEE) is such a policy that is intended to be used as an instrument to redress previous inequalities.

The Department of Trade and Industry requires companies to reflect their BBBEE credentials to demonstrate their commitment to transformation. The BBBEE Codes of Good Practice involves the transferral of ownership to black people and women, ensuring representation at board- and

managerial level, and the preferential procurement of goods and services from black- and female-owned enterprises.

The critics of transformation see BBBEE as interference from Government in the running of a business. Even though the Government has good intentions with all the legislation put in place to redress the imbalances of the past, it is unfortunate that only a selected few has benefited from BBBEE. This is reflected in the selected few black people who became instant millionaires while the majority of black people remain poor. Change in ownership of companies has definitely not benefited the majority of PDI's, nor did it lead to a wider or better distribution of wealth amongst PDI's. Change in ownership unfortunately also did not lead to the opening up and creation of opportunities for PDI's.

It can be derived that education is the main instrument that should be used to explain the rationale behind BBBEE. By educating business owners with regard to BBBEE, business owners will be able to see that BBBEE is for the greater benefit of their company and for the country as a whole.

3.2 RESEARCH METHODOLOGY AND QUESTIONNAIRE DEFINITIONS

3.2.1 Populations

According to Levine (2005:2) the mathematics of probability theory form the foundation of inferential statistics. Inferential methods select samples, portions of an entire set of data, rather than the complete set itself, which is then known as the population or universe.

A population (or universe) is the totality of items or things under consideration (Levine 2005:2).

3.2.2 Sample

According to Levine (2005:10) there are two types of samples, it is either a probability sample or a non-probability sample. The non-probability samples can then be further divided into Judgement Samples; Quota Samples, Chunk Samples and Convenience Samples. Levine (2005:10) also says that the common type of non-probability sample that is used is the convenience sample. In a convenience sample items are selected into the sample based only on the fact that they are easy, inexpensive, or convenient to sample.

Due to the time constraint for this study, the researcher made use of a convenience sample by targeting all the Civil Consulting Engineering Companies that reside within the boundaries of the greater Pretoria area and that is registered with SAACE (now CESA).

3.2.3 Questionnaire

A questionnaire is an inexpensive way to gather data from a potentially large number of respondents. Often it is the only feasible way to reach a number of reviewers large enough to allow statistical analysis as a result. A well-designed questionnaire that is used effectively can gather information on both the overall performance of the test system as well as information on specific components of the system. (www.gtech.edu, date accessed 10 October 2008).

According to the website www.cc.gtech.edu (date accessed 10 October 2008) questionnaires are used mainly for the following reasons:

- When resources and money are limited;
- When it is necessary to protect the privacy of the participant;
- When corroborating other findings.

3.3 RESEARCH DESIGN

3.3.1 Method of choice for the Empirical Research

For the purpose of this study, a survey was done to determine the status quo within the civil consulting engineering firms that reside within the boundaries of the greater Pretoria area. The survey was done by making use of a questionnaire to collect the necessary data that would enable the researcher to reach conclusions on the state of transformation in the civil consulting engineering industry.

The purpose of using a survey for the study was to provide the researcher with a snapshot of the status quo with regard to transformation in the Civil Consulting Engineering Industry. The trends, patterns and conclusions that the researcher derived from the data analysis, could be seen as a true reflection of what is the current status quo within the Civil Consulting Engineering Sector for the civil consulting engineering companies that resides within the boundaries of the greater Pretoria.

The researcher has done his survey (collected his data) by making use of a questionnaire. It is essential during the development of a questionnaire that the researcher considers the following aspects:

- Firstly - the researcher must identify all possible variables for the model;
- Secondly - the researcher must then test the variables;
- Thirdly – the researcher must select those variables that will have a definite influence on the model.

- Fourthly – the researcher must determine and strive to collect the correct quantity of raw data that can be manipulated to achieve the desired results that the researcher is looking for.

During the questionnaire development, it is essential for the researcher to identify all possible input variables for the model. The researcher then had to test and select those variables that can influence the model the most. Finally the researcher had to determine what the correct quantity of raw data was and then had to collect the predetermined quantity of raw data.

According to Neuman (1997:p231-237) the following points must be considered when designing questionnaires:

- Exactly what do you want to find out?
- Why should people fill it in?
- Will they tell the truth?
- Length and sequence of questions
- Wording: avoid leading, long, complicated questions, silly, rude and annoying questions.
- The covering letter explaining who you are and the purpose of the research.

3.3.2 Identification and selection of possible input variables

A literature study (Chapter 2) was conducted to develop an understanding of transformation through the implementation of Broad-Based Black Economic Empowerment, affirmative Action and employment Equity in South Africa. The researcher has also managed to establish the Status Quo regarding transformation within the construction sector.

Data collection through the questioning technique can be classified as either variables or attributes. Variables are those characteristics that are measurable, such as the percentage or amount spent on activities (i.e. procurement) per annum, while attributes are characterized by conformance or non-conformance to either legislation, rules etc..

3.3.3 Determination of population and Size

The researcher had a very limited period of time available to do the research, and therefore decided to base his research on the civil engineering companies that reside within the boundaries of the greater Pretoria and which are registered members of CESA.

The original sample size was 70, but due to the lack in response, the researcher decided to target 30 firms. The researcher telephonically contacted the 30 firms that were targeted and 23 firms agreed that to complete the questionnaire. The 30 firms that were targeted represent 42.86% of

the civil consulting engineering companies that reside within the boundaries of the greater Pretoria. The 23 firms that initially verbally agreed to complete the questionnaires represent 32.86% of the civil consulting engineering companies that reside within the boundaries of the greater Pretoria.

Refer to Appendix 1 for a full list of the 30 companies that were targeted by the researcher.

3.3.4 The research conducted by the researcher included the following procedures:

- Questionnaires were distributed; completed and returned by the respondents,
- Informal interviews were conducted with several influential people within the civil consulting engineering industry, some of the persons that were interviewed were:
 - Phil Gallie – Corporate manager of KV3 consulting engineers;
 - Andries Claassens – HR Executive of Ninham Shand consulting engineers;
 - Felix Reinders – Member of the ECSA committee;
 - Brenda Lacey Smith – School of Consulting Engineering (SCE) manager;
- The reading of articles and books on transformation,
- The studying of the completed Employment Equity Report for 2007 of one of the companies surveyed that was submitted to the department of labour.

3.4 ANALYSIS OF THE QUESTIONNAIRE OUTPUT

This section reflects the summarized results of the empirical researched done by the researcher, based on the completed questionnaires that were received back from the participants. However, the response rate was a disappointing 30.43% (only 7 of the 23 companies that verbally agreed to complete the questionnaires actually completed and returned the questionnaires).

The averages of the seven questionnaires that were received were used for the purpose to complete a BBBEE scorecard and thus reflect the status quo in the civil consulting engineering firms that resides within the boundaries of the greater Pretoria.

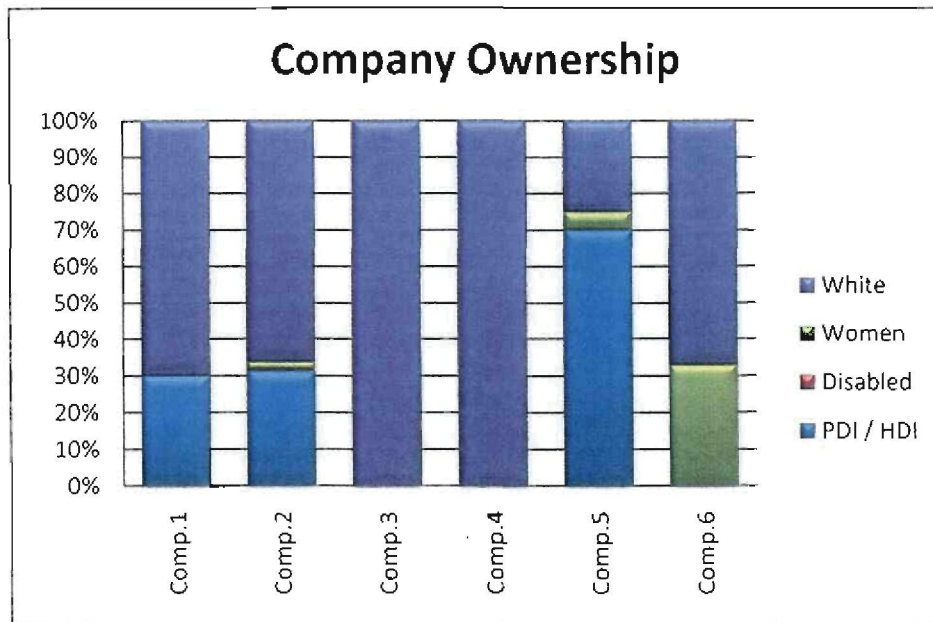
3.4.1 Ownership

The graph below (Graph 3.1) reflects the results obtained from the completed questionnaires and it thus reflects the status quo with regard to ownership for the Civil Consulting Engineering companies that reside within the greater Pretoria area.

The construction sector Broad-Based Black Economic Charter – version 6, set the following targets that must be reached by 2013 for the construction industry:

- 30% economic interest held by black people and 30% participation by black people in voting rights.
- 10% economic interest held by black women and 10% participation by black women in voting rights.
- 10% (5% for BEPs) economic interest held by black broad based groups and or black designated groups, specifically black employees.

Graph 3.1: Company Ownership.



(Source: Own Compilation).

From Graph 3.1 above, the conclusion can be made that transformation through equity ownership is currently being addressed within the Civil Consulting engineering firms that reside within the greater Pretoria area. Equity ownership must however still be addressed by most of the companies.

Reflected in Graph 3.1 above, it can be seen that two companies have got one hundred percent white ownership. The company with the largest PDI/HDI ownership has got a PDI/HDI ownership of seventy percent.

Table 3.1: Company Ownership - Indicating the charter objectives, the current average percentage representation (status quo for the Consulting Engineering Companies that resides within the greater Pretoria area) and the shortfall that should be addressed.

Charter objectives for 2013		Current average percentage representation	Current average shortfall that should be addressed
Economic interest held by Black people	30%	26.90%	3.10%

Source: Own compilation

From the research done and as reflected in Graph 3.1 and Table 3.1 above, the inability of firms to comply with the requirements as set out by the construction charter may be attributed to the fact that the engineering sector is not seen as a sector that is as lucrative as for instance the financial sector, thus the same amount of money is not invested into this sector as in other economic sector within the South African economy.

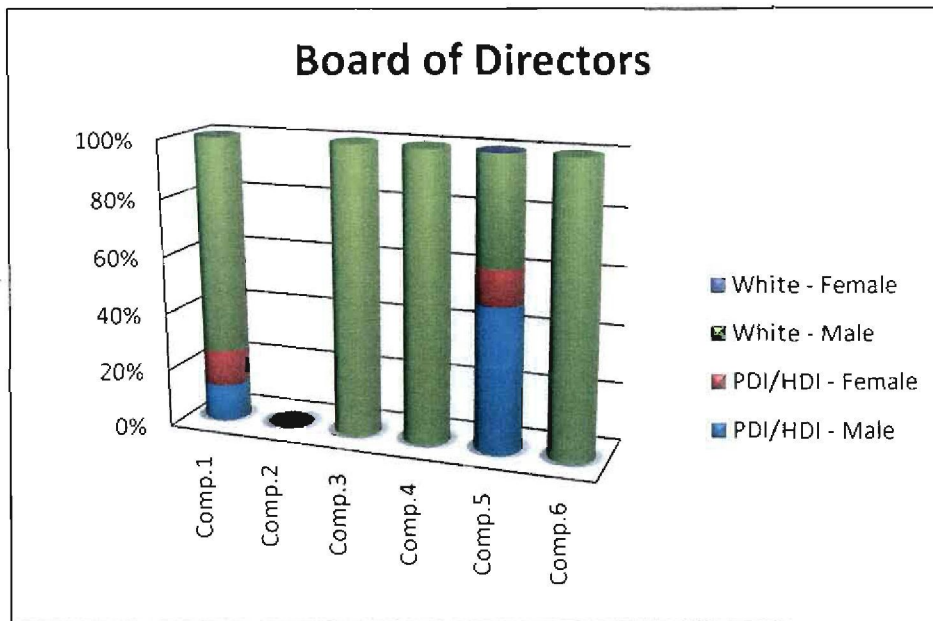
3.4.2 Management Control

The graph below (Graph 3.2) reflects the results obtained from the completed questionnaires. It in other words reflects the status quo with regard to management control on the “board of directors” level as well as on “senior management level” for the Civil Consulting Engineering companies that reside within the greater Pretoria area.

The construction sector Broad-Based Black Economic Charter – version 6 set the following targets that must be reached for the construction industry.

- Dec 2013 (in five years):
 - 40% black people at board level;
 - 20% black women at board level;
- Dec 2010 (in two years) and Dec 2013 (in five years) respectively:
 - 25%/40% black people at executive management level;
 - 10%/16% black women at executive management level.

Graph 3.2: Management Control – Board of Directors level



* Companies with 0% reflected in the graph, did not complete this part of the questionnaire.

(Source: Own compilation)

From Graph 3.2 above, the conclusion can be made that transformation through Management Control is currently being addressed within some Civil Consulting engineering firms that reside within the greater Pretoria area. Management Control must however still be addressed by most of the companies.

Reflected in Graph 3.2 above, it can be seen that three companies have got a one hundred percent white Board of Directors. The one company has got a twelve point five percent PDI/HDI (male) and twelve point five percent PDI/HDI (female) and the other company has got a fifty percent PDI/HDI (male) and twelve point five percent PDI/HDI (female) representation on the Board of Directors.

Table 3.2: Management Control – Board of Directors level - Indicating the charter objectives, the current average percentage representation (status quo for the Consulting Engineering Companies that resides within the greater Pretoria area) and the shortfall that should be addressed.

Charter objectives for 2013		Current average percentage representation	Current average shortfall that should be addressed
Black people at board level	40%	14.58%	24.42%
Black women at board level	20%	4.17%	11.83%

Source: Own compilation

This inability of the firms to comply (as indicated in Graph 3.2 and Table 3.2) with the requirements as set out by the construction charter can be attributed to the limited number of suitably qualified and experienced black and designated employees that are currently employed within the civil consulting engineering industry. Although the numbers of black and other designated employees have increased amongst the employees with 0-5 years of work experience, this will not help to change the status quo with regard to management control. If the sector manages to retain these young black and other designated employees in the Civil Consulting Engineering Sector, the same graph could reflect a total different picture within the next 5 to 10 years.

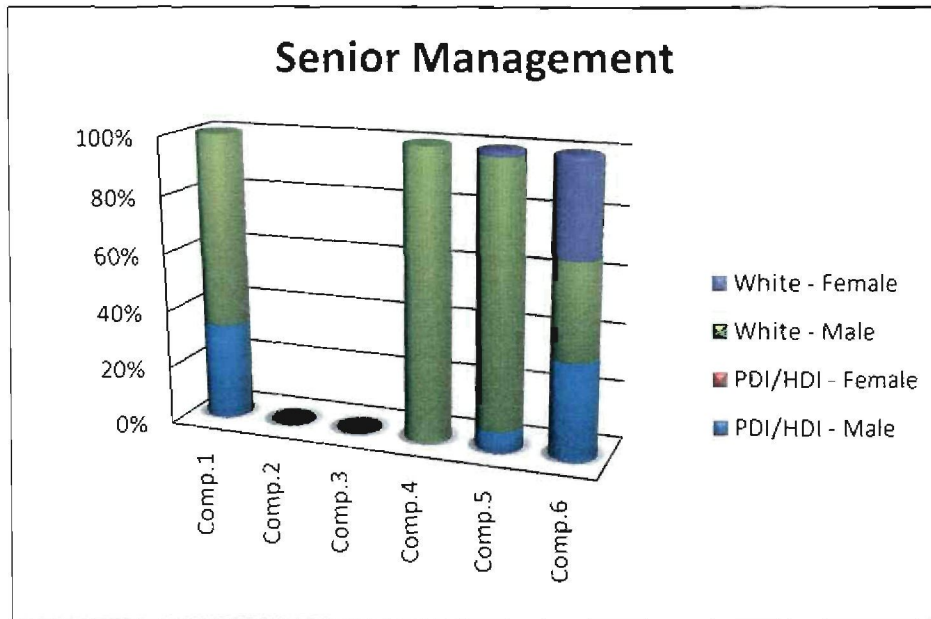
3.4.3 Employment Equity

The graph below (Graph 3.3A) reflect the results obtained from the completed questionnaires and it reflects the status quo with regard to Employment Equity for the Civil Consulting Engineering companies that reside within the greater Pretoria area.

The construction sector Broad-Based Black Economic Charter – version 6 set the following targets that must be reached by 2013 for the construction industry.

- Dec 2010 (in two years) and Dec 2013 (in five years) respectively:
 - 25%/40% black people at executive management level;
 - 10%/16% black women in Senior Management;
 - 30%/40% black people in Middle Management;
 - 12%/16% black women in Middle Management;
- For BEPs a single combination target as follows:
 - 30%/40% black people at all management levels;
 - 12%/16% black women at all management levels;
- Enterprises in the sector commit to achieve the following targets by Dec 2013 (in five years):
 - 65% black people in Junior Management; and
 - 27% black women in Junior Management.

Graph 3.3A: Employment Equity – Senior management level



* Companies with 0% reflected in the graph, did not complete this part of the questionnaire.

(Source: Own compilation)

From Graph 3.3A above, the conclusion can be made that transformation through Employment Equity is currently being addressed within the Civil Consulting engineering firms that reside within the greater Pretoria area. Management Control must however still be addressed by most of the companies.

Reflected in Graph 3.3A above, it can be seen that three companies have majority white males in Senior Management positions. The averages for the four different categories, for the companies that reside within the greater Pretoria area, are as follow:

- PDI/HDI – Male = 12.24%
- PDI/HDI – Female = 0%
- White – Male = 48.00%
- White – Female = 5.89%

Table 3.3A: Employment Equity – Senior management level - Indicating the charter objectives, the current average percentage representation (status quo for the Consulting Engineering Companies that resides within the greater Pretoria area) and the shortfall that should be addressed.

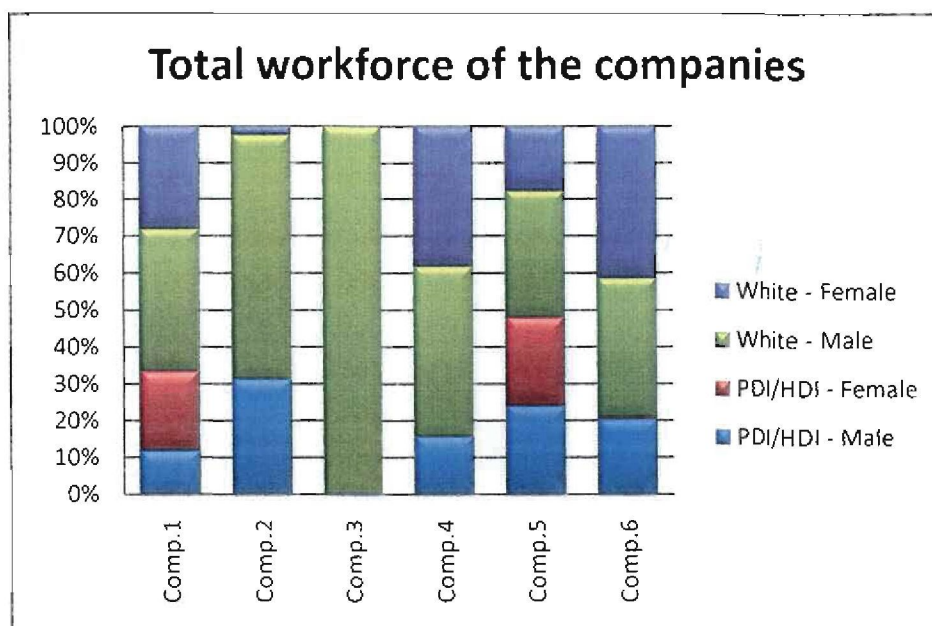
Charter objectives for 2013		Current average percentage representation	Current shortfall that should be addressed
Black women at senior management level	16%	14.58%	1.42%

Source: Own compilation

This inability of the firms to comply with the requirements as set out by the construction charter can be attributed to the limited number of suitably qualified and experienced black and designated employees that are currently employed within the civil consulting engineering industry. Although the number of black and other designated employees has increased amongst the employees with 0-5 years of work experience, this will not help to change the status quo with regard to management control. If the sector manages to retain these young black and other designated employees in the Civil Consulting Engineering Sector, the same graph could reflect a total different picture within the next 5 to 10 years.

As a matter of interest the researcher compiled Graph 3.3B below. This graph reflects the total workforce of the companies.

Graph 3.3B: Total workforce of the companies



(Source: Own compilation)

Reflected in Graph 3.3B above, it can be seen that only one company have majority white males in its service. The averages for the four different categories, for the companies that reside within the greater Pretoria area, are as follow:

- PDI/HDI – Male = 19.94%
- PDI/HDI – Female = 5.99%
- White – Male = 44.12%
- White – Female = 17.47%

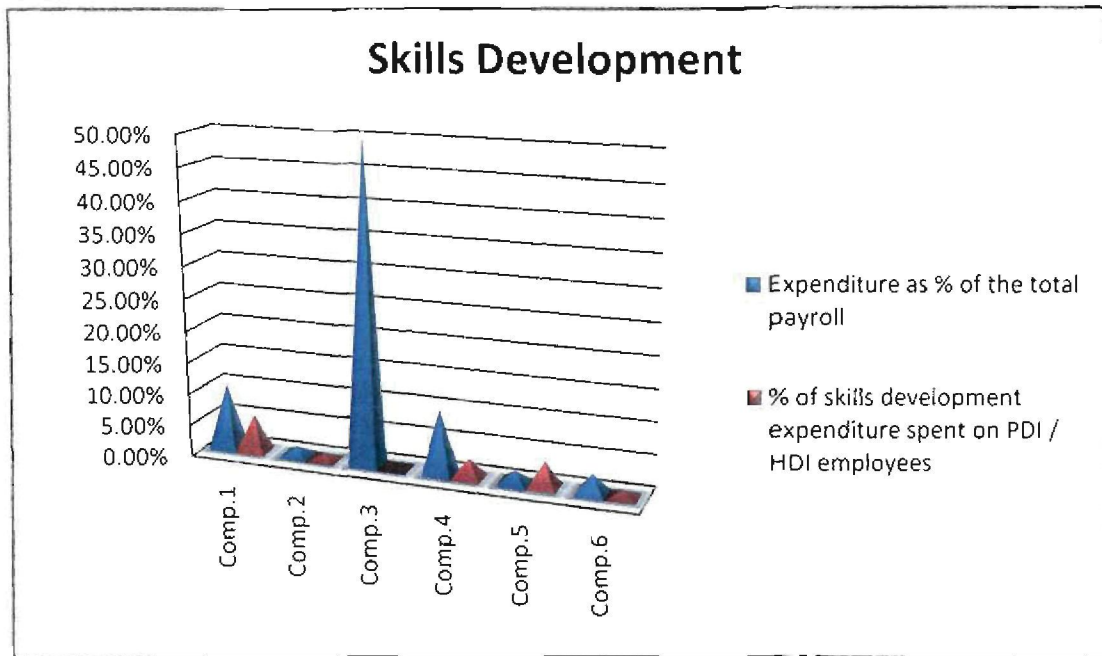
3.4.4 Skills Development

The graph below (Graph 3.4) reflects the results obtained from the completed questionnaires and it reflects the status quo with regard to skills development for the Civil Consulting Engineering companies that reside within the greater Pretoria area.

The construction sector Broad-Based Black Economic Charter – version 6 set the following targets that must be reached by 2013 for the construction industry.

- 1.5% of payroll per annum on skills development;
- 70% of total skills development spent on black people;
- 25% of skills development spent on black people allocated to black women;
- 25% of skills development spent on black people allocated to black management;
- 20% of skills development spent on black management allocated to black women management;
- 2.5% (1.5% for BEPs) of employees on learnerships calculated as a rolling 12 month average;
- 70% of Total learnerships on black people;
- 35% of Learnerships on black people must be black women;
- 30% of Learnerships on black people must be from designated groups; and
- 0.3% of payroll on bursary expenditure on black students.

Graph 3.4: Skills Development



*The percentages reflected might be misleading because the company sizes differ and thus their payroll differ.

From Graph 3.4 above, the conclusion can be made that transformation through skills development is currently being addressed within the Civil Consulting engineering firms that reside within the greater Pretoria area. Although the companies are investing money in skills development, it seems as though skills development must still be addressed by most of the companies.

Reflected in Graph 3.4 above, it can be seen that three companies have majority white males in Senior Management positions. The averages for the four different categories, for the companies that reside within the greater Pretoria area, are as follows:

- PDI/HDI – Male = 12.24%
- PDI/HDI – Female = 0%
- White – Male = 48.00%
- White – Female = 5.89%

Table 3.4: Skills Development - Indicating the charter objectives, the current average percentage representation (status quo for the Consulting Engineering Companies that resides within the greater Pretoria area) and the shortfall that should be addressed.

Charter objectives for 2013		Current average percentage representation	Current shortfall that should be addressed
Expenditure as % of the total payroll	1.5%	17.79%	16.49% is currently overspent
% of skills development expenditure spent on PDI / HDI employees	70%	2.44%	67.56%

Source: Own compilation

It could help if engineering was promoted as a career opportunity amongst scholars who has maths and science on higher grade.

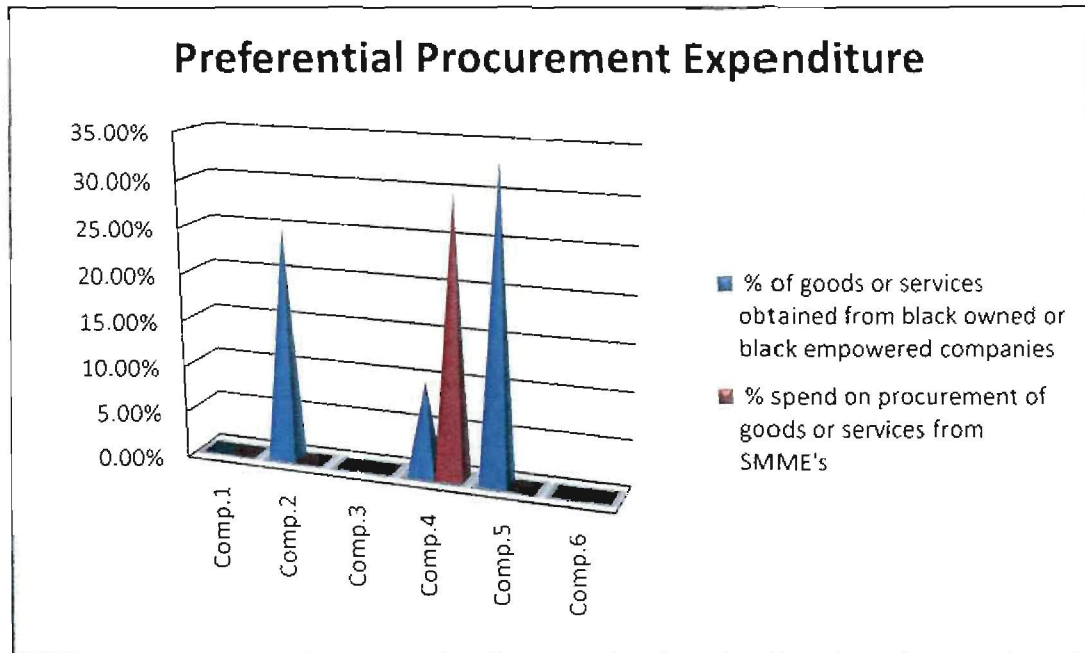
3.4.5 Preferential Procurement

The graph below (Graph 3.5) reflects the results obtained from the completed questionnaires and it reflects the status quo with regard to preferential procurement for the Civil Consulting Engineering companies that reside within the greater Pretoria area.

The construction sector Broad-Based Black Economic Charter – version 6 set the following targets that must be reached by 2013:

- to achieve a weighted target of procurement spent from BBBEE suppliers of 70% by Dec 2013 (in five years):
- In addition to the targets the parties to the charter undertake to:
 - Develop and implement targeted procurement policies, including promoting accessibility of tendering opportunities, early payment cycles and other supply side interventions for micro and small enterprises;
 - Implement mechanisms to counter fronting and the abuse of targeting arrangements;
 - Promote compliance to the Broad Based Black Economic Empowerment Act amongst their suppliers by assessing the supplier in terms of their relevant sector charters where these exist as codes of good practice and in terms of the generic scorecard where they do not; and
 - Enhance benefits to local communities, target, where appropriate, procurement from local enterprises, specifically micro and small enterprises with black ownership exceeding 50%.

Graph 3.5: Preferential Procurement



* Companies with 0% reflected in the graph, did not complete this part of the questionnaire.

(Source: Own compilation)

From Graph 3.5 above, the conclusion can be made that transformation through preferential procurement expenditure currently is being addressed within the Civil Consulting engineering firms that reside within the greater Pretoria area. Although the companies are spending money on preferential procurement, it seems as though more money can be spent on preferential procurement by most of the companies.

Table 3.5: Preferential Procurement - Indicating the charter objectives, the current average percentage representation (status quo for the Consulting Engineering Companies that resides within the greater Pretoria area) and the shortfall that should be addressed.

Charter objectives for 2013		Current average percentage representation	Current shortfall that should be addressed
% of goods or services obtained from black owned or black empowered companies	70%	16.39%	63.61%

Source: Own compilation

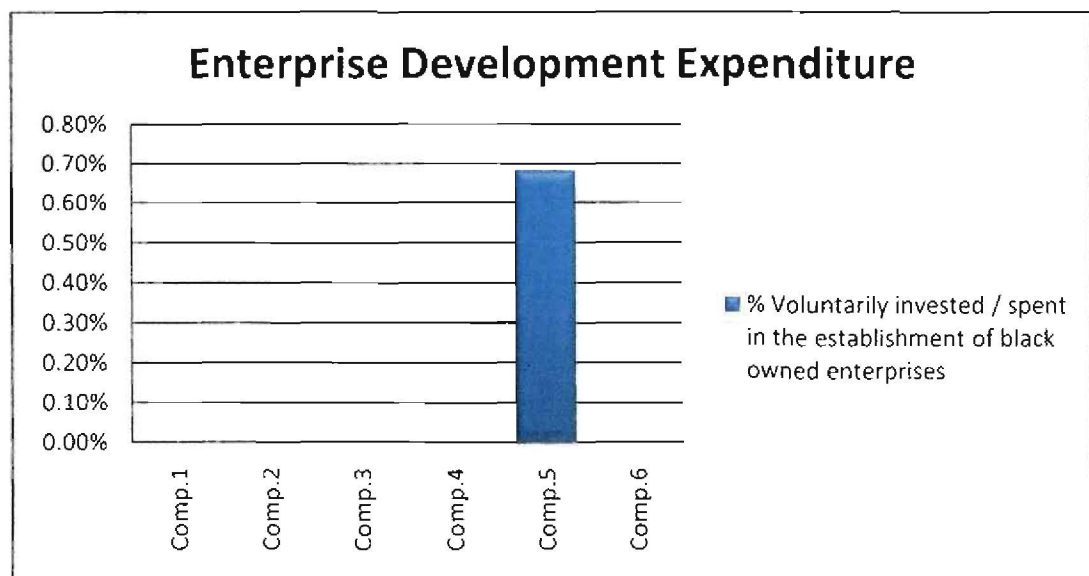
3.4.6 Enterprise Development

The graph below (Graph 3.6) reflects the results obtained from the completed questionnaires and it reflects the status quo with regard to enterprise development for the Civil Consulting Engineering companies that reside within the greater Pretoria area.

The construction sector Broad-Based Black Economic Charter – version 6 set the following targets that must be reached by 2013:

- Enterprises in the sector will target a percentage of total annual turnover of the developing organisation as a percentage of total annual turnover of the established organisation of 5% by Dec 2013

Graph 3.6: Enterprise Development



* Companies with 0% reflected in the graph, did not complete this part of the questionnaire.

(Source: Own compilation.)

From Graph 3.6 above, the conclusion can be made that transformation through enterprise development is currently not being addressed (with the exception of one company) within the Civil Consulting engineering firms that reside within the greater Pretoria area. Although the one company that have completed this part of the questionnaire spent a lot of money on enterprise development, it seems as though more money can be spent on preferential procurement by most of the companies.

The Civil Consulting Engineering Sector can increase their enterprise development by either investing in or forming partnerships with black-owned or black empowered enterprises. This will help to develop the black-owned or black empowered enterprises and it will further result in that transfer of appropriate and necessary skills transfer.

3.4.7 Social Economic Development

The construction sector Broad-Based Black Economic Charter – version 6 set the following targets that must be reached by 2013:

- Each enterprise will achieve a target of 0.25% by Dec 2013 of annual payroll on CSI, which will be split between general CSI and sector specific projects.

3.5 MAJOR FINDINGS

The definitions, objectives and the measurements for transformation through BBBEE, AA and EE is set-out and defined by legislation (different Act's and charters). The legislation also defines the policy instruments that should be utilized to obtain the objectives as set out by legislation.

Business partnerships (investing in enterprise development) is one of the means through which objectives (as set out by legislation) can be reached and it would also positively affect the future contributions of smaller black-owned or black empowered enterprises. This will further have a positive effect the economy of South Africa.

At the core of what seems to be relative slow transformation that takes place in the Civil Consulting Engineering Sector, lays bigger problems than just unwillingness by enterprises to transform.

One of the biggest obstacles that hamper transformation is the existing skills shortage in our country. Together with skills shortage that exists, there is currently also a shortage in supply of suitably qualified and experienced black and other designated employees in the Civil Consulting Engineering Sector that can be appointed in middle, senior and executive management positions. This matter is currently being addressed by the Civil Consulting Engineering Sector and the fruits of the current investment in these people will start to show within a couple of years.

3.6 SUMMARY

The researcher concludes that a number of the Civil Consulting Engineering Companies that reside within the greater Pretoria area are putting in an effort to adhere to and comply with the legislation and guidelines pertaining to Transformation, Affirmative Action and Employment Equity. Unfortunately there are still some companies that still have a long way to go to adhere to and comply with legislation and guidelines. Adherence and compliance will become all the more difficult due to the shortage of adequately skilled personnel.

The researcher attached the following graphs obtained from the CESA 2008 - State of the South African Consulting Engineering Profession (CESA 2008, 41-44):

- Appendix 5 - Firms wanting to increase staff,
- Appendix 6 - Report Engineering shortage now critical,
- Appendix 7 - Recruitment problems.

From the abovementioned graphs it is clear that there are many Engineering companies in South Africa that has the need to appoint engineering personnel. These abovementioned graphs thus confirm the researcher's conclusion that there is a shortage of adequately experienced engineering personnel that can currently be appointed within the engineering industry.

South Africa has been experiencing a brain-drain for the last couple of years where highly skilled and mostly Professionally registered Engineers, Technologists and Technicians emigrate to other countries in search of better opportunities. The reasons for immigrating to other countries differ from person to person, but it seems that the most common perception amongst the people that immigrate, is that is very difficult to further your career in South Africa due to Broad-Based Black Economic Empowerment, Affirmative Action, Employment Equity.

4. CHAPTER 4 – CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

The purpose of this study was twofold. Firstly, it was to determine the status quo with regard to transformation within the Civil Consulting Engineering firms that resides within the greater Pretoria area. Secondly, it was to determine what stumbling blocks, if any, exist that acts as a hindrance to transformation within the Civil Consulting Engineering firms that reside within the greater Pretoria area. The researcher will now make his conclusions and recommendations based on the information gathered from his literature and empirical studies.

4.2 CONCLUSIONS

In the South African economy under the previous dispensation, the Civil Consulting Engineering industry was known as very Professional and highly ethical industry that could compete with any international company on any given day.

Consortiums were formed and working agreements were signed between two or more companies to handle projects that were too big for one Civil Consulting Engineering firm alone. This is nothing new in the Civil Consulting Engineering Sector.

This industry has always been associated with very high efficiency and ingenuity. Employees in this industry were usually branded as unsocial workaholic employees, who worked for the love of the career. These people were so passionate about their job that remuneration was never really very high on their priority list.

With the change in the South African economy after the first democratic elections held in 1994, also came the dawn of a new era for the construction sector. A very quiet period in which the new government did not manage to spend the budgets allocated to the upgrading and construction of new infrastructure has changed and turned the whole industry on its head. When the government suddenly wanted to start spending the money on infrastructure development, they found that now there is a skill shortage.

A spin-off from this turnaround is that South African citizens suddenly see the engineering industry in a new light. As a result there has been a substantial increase in the salaries of workers within this industry.

The Government's decision to start with infrastructure development and upgrading of existing infrastructure led to a massive growth in the South African economy. Any growing economy

should include all of its population, and the opposite is obvious as well, namely that any economy that does not grow cannot include all the country's citizens in a meaningful way.

The Construction Sector Broad-Based Black Economic framework regulates the construction sector, thus insuring that Government policies and legislation with regard to transformation through BBBEE, AA and EE are adhered to when redressing past racial discrimination and other consequences thereof.

Taking cognisance of the past history of injustices under the previous dispensation that were developed, planned and enforced over a number of years, transformation should be seen as redressing these past imbalances and injustices.

4.3 RECOMMENDATIONS

From the research conducted, the researcher concludes that enterprises in the Civil Consulting Engineering Sector are committed to, and embraces transformation. However, there are major obstacles standing between the Civil Consulting Engineering Sector and successful transformation.

The researcher identified the following issues that should be addressed as a matter of urgency. The researcher concludes that if the following issues are addressed effectively, enterprises in the Civil Consulting Engineering industry should be able to address transformation more effectively:

- The current limited numbers of suitably qualified black candidates and other designated groups that are available for employment in the consulting engineering industry.
- The limited numbers of scholars that finish matric with adequate marks in Maths and Science on higher grade (which is a prerequisite for studying engineering).
- Re-evaluate the current school system.
- Stop the exodus (due to emigrating, retirement or settlement packages for early retirement) of highly skilled civil engineering professionals from the country – this leaves a gap of mentors that are now not available for mentoring more junior personnel.
- Promote the construction sector to give it a higher status, ensuring that engineers get the same recognition (their work valued the same) as doctors, lawyers etc.

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Appendix 1

(List of Companies Approached)

<u>Pretoria</u>	
<u>Company Name</u>	<u>Telephone numbers</u>
Africon	012 - 427 2000
Afri-Infra Group (Pty) Ltd	012 - 346 1848
Arcus Gibb	012 - 348 5880/9
ARQ (Pty) Ltd	012 - 348 6668
BKS (Pty) Ltd	012 - 421 3500
BVI Consulting Engineers Gauteng (Pty) Ltd (Member: BVI Group)	012 - 349 0099
BVN Consulting Engineers (Pty) Ltd	012 - 991 5305
Civil Concepts (Pty) Ltd	012 - 365 1414
Conic Consulting Engineers & Project Managers (Pty) Ltd	012 - 809 1100
DLV Engineers (Pty) Ltd	012 - 342 5300
DMV Strukture Ing	012 - 807 2141
DSM Consulting Engineers	012 - 348 7285
Endecon Ubuntu (Pty) Ltd	012 - 662 6770
Ilifa Africa Engineers	012 - 362 1473
Kwezi V3 Engineers	012 - 425 6300
Ninham Shand	012 - 643 9000
Nyeleti Consulting (Pty) Ltd	012 - 361 3629
PD Naidoo & Associates (pty) Ltd	012 - 566 8300
SNA Civil & Structural Engineers (Pty) Ltd	012 - 842 0000
SRK Consulting	011 - 411 1111
SSI Engineers And Environmental Consultants (Pty) Ltd	011 - 798 6000
V & V Consulting Engineers	012 - 346 1255
Vela VKE Engineers	012 - 481 3800
VGI Consulting Inc	012 - 682 9140
VIP Consulting Engineers (Pty) Ltd	012 - 809 0010
WRP Consulting Engineers (Pty) Ltd	012 - 346 3496

Appendix 2

(Example of Questionnaire)

To the **CEO / Corporate Manager / Human Resource Manager**

RE: Questionnaire for the Mini-dissertation that will be submitted by Mr. J.A Nienaber, to the Faculty of Economic and Management Sciences (Business School) in partial fulfilment of the requirements for the degree Masters in Business Administration at the Potchefstroom campus of the North West University.

I am herewith respectfully requesting you to please assist me with my research for my mini-dissertation. *This questionnaire was compiled by Mr. J.A Nienaber under the supervision of his study leader (Dr. Christoff Botha of the Potchefstroom Business School – Potchefstroom campus of the North West University).*

Please take the time and be so kind as to complete the attached questionnaire. After you have completed the questionnaire, please send the completed questionnaire back to Mr. Nienaber on or before 30 September 2008.

Please read the following instructions with regard to the completion of the attached questionnaire:

1. Please complete the questionnaire by answering as honestly as possible;
2. Please only mark one answer / option per question (unless instructed otherwise);
3. Please only mark one answer / option per question with an "x" (unless instructed otherwise);
4. Thank you for the time taken to complete the questionnaire.

Your questionnaire will be treated as **PRIVATE AND CONFIDENTIAL**. The data / information received from you will be used to be "processed" for statistical purposes.

List of abbreviations:

- B - Black
- A - Asian
- I - Indian
- C – Coloured
- W – White
- HDI – Historically Disadvantaged Individual
- PDI – Previously Disadvantaged Individual
- SMMEs – Small, medium and micro enterprises

I would like to take this opportunity to thank you and your company for the time that was set aside to complete the questionnaire.

J.A Nienaber

082 920 2496

cobus.ronell@telkomsa.net; or P.O. Box 61424 Pierre Van Ryneveld 0045

A. Current Status of the Company

- 1) Does your Company have a BEE rating currently?

	Yes		No
--	-----	--	----

- 2) If you answered "YES" to the previous question, please specify the BEE rating?

- 3) What level of service provider is your Company?

BEE Status	Qualifications (Points on Generic Scorecard)	BEE Procurement recognition level	Your Company
Level 1 Contributor	> 100 Points	135% (e.g. R 1.00 = R 1.35)	
Level 2 Contributor	85 to 100 Points	125% (e.g. R 1.00 = R 1.25)	
Level 3 Contributor	75 to 85 Points	110% (e.g. R 1.00 = R 1.10)	
Level 4 Contributor	65 to 75 Points	100% (e.g. R 1.00 = R 1.00)	
Level 5 Contributor	55 to 65 Points	80% (e.g. R 1.00 = R 0.80)	
Level 6 Contributor	40 to 45 Points	60% (e.g. R 1.00 = R 0.60)	
Level 7 Contributor	40 to 45 Points	50% (e.g. R 1.00 = R 0.50)	
Level 8 Contributor	30 to 40 Points	10% (e.g. R 1.00 = R 0.10)	
None-Compliant Contributor	< 30 Points	0% (e.g. R 1.00 = R 0.00)	

- 4) What is your Company's annual turnover?

	Less than R 5 Million		R 5 Million to R 35 Million
	More than R 35 Million		Don't know

- 5) Does your Company have equity shareholding according to the following groups? If yes, by what percentage (%)?

	Yes	%	No
PDI / HDI (B/A/I/C)			
Disabled			
Women			
White			

Registration Status	% Shareholding	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					

Registration Status	% Shareholding	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

6) Please complete the following tables with regard to the "Board of Directors" of your Company.

	PDI / HDI (B/A/I/C)	White	TOTAL
Number of persons			
Percentage ownership			

Registration Status	% of the Board of Directors	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%	7%	70%	30%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

7) Please complete the following tables with regard to the "Executive and Senior Management" of your Company.

	PDI / HDI (B/A/I/C)	White	TOTAL
Number of persons			
Percentage ownership			

Registration Status	% of Executive and Senior Management	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

8) Please complete the following table with regard to the breakdown of your Company's personnel structure.

a. Middle Management

Registration Status	% of Middle Management	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					

Registration Status	% of Middle Management	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
Technicians					
Non Technical Personnel					
TOTAL					

b. Senior Technical Personnel (Not in Management)

Registration Status	% of Senior Technical Personnel	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

c. Junior Technical Personnel

Registration Status	% of Junior Technical Personnel	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					

Registration Status	% of Junior Technical Personnel	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

d. Financial Personnel

Registration Status	% of Financial Personnel	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

e. Administrative Personnel

Registration Status	% of Administrative Personnel	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					

Registration Status	% of Administrative Personnel	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

f. Lower Grade(s) Personnel

Registration Status	% of Lower Grade Personnel	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

- 9) Please complete the following tables below, with regard to the expenditure of your Company for the past financial year (Feb.'07 to Feb.'08).

i. Skills Development Expenditure		%
a.	Expenditure as a percentage of the total payroll.	
b.	Percentage of skills development expenditure spent on PDI / HDI (B/A/I/C) employees.	

ii. Procurement Expenditure		%
a.	Percentage of goods and services obtained from black owned or black empowerment enterprises.	
b.	Percentage (Amount of money) spent on procurement of goods and services from black SMMEs (Expressed as a % of Net Profit after Tax).	

iii. Enterprise Development		%
a.	Percentage (Amount of money) voluntarily invested / spent in the establishment of black owned enterprises (Expressed as a % of Net Profit after Tax).	

B. Future Status of the Company

10) Does the company you work for aspire to increase the equity shareholding of the following groups within the next three years? If yes, by what percentage (%)?

	Yes	%	No
PDI / HDI (B/A/I/C)			
Disabled			
Women			
White			

Registration Status	% Shareholding	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%	7%	70%	30%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

11) Does your Company aspire to increase its "Board of Directors" within the next three years? If yes, please complete the table below:

	PDI / HDI (B/A/I/C)	White	TOTAL
Number of persons			
Percentage ownership			

Registration Status	% of the Board of Directors	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

12) Does your Company aspire to increase or to change the "Executive and Senior Management" of the Company within the next three years? If yes, please complete the table below:

	PDI / HDI (B/A/I/C)	White	TOTAL
Number of persons			
Percentage ownership			

Registration Status	% of Executive and Senior Management	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					

Registration Status	% of Executive and Senior Management	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

13) Does your Company aspire to change the demographics of the Company within the next three years? If yes, please complete the table below with regard to the following breakdown of your Company's personnel structure:

a. Middle Management

Registration Status	% of Middle Management	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

b. Senior Technical Personnel (Not in Management)

Registration Status	% of Senior Technical Personnel	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					

Registration Status	% of Senior Technical Personnel	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

c. Junior Technical Personnel

Registration Status	% of Junior Technical Personnel	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

d. Financial Personnel

Registration Status	% of Financial Personnel	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

e. Administrative Personnel

Registration Status	% of Administrative Personnel	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%		70%	30%
			7%	80%	20%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

f. Lower Grade(s) Personnel

Registration Status	% of Lower Grade Personnel	Race / Ethnic Group		Gender	
		PDI / HDI (B/A/I/C)	White	Male	Female
(e.g. Prof. Engineers)	10 %	3%	7%	70%	30%
Prof. Engineers					
Prof. Technologists					
Prof. Technicians					
Engineers					
Technologists					
Technicians					
Non Technical Personnel					
TOTAL					

- 14) Please complete the following tables below, with regard to the expenditure of the Company you work for, for the next three years.

i. Skills Development Expenditure		%
c.	Expenditure as a percentage of the total payroll.	
d.	Percentage of skills development expenditure spent on PDI / HDI (B/A/I/C) employees.	

ii. Procurement Expenditure		%
a.	Percentage of goods and services obtained from black owned or black empowerment enterprises.	
b.	Percentage (Amount of money) spent on procurement of goods and services from black SMMEs (Expressed as a % of Net Profit after Tax).	

iii. Enterprise Development		%
a.	Percentage (Amount of money) voluntarily invested / spent in the establishment of black owned enterprises (Expressed as a % of Net Profit after Tax).	

15) What methods are employed by your Company to promote employees in terms of Professional growth?

Internal training	
External training	
Human Resource Policy	
Other methods	
If other methods are used, please describe / elaborate:	

16) What method is primarily used by your Company to recruit new employees?

Internal advertisements	
Open market	
Head-hunting	
Universities, Technicians and colleges	
Schools	
Historically / Previously disadvantaged areas	
Other methods	
If other methods are used, please describe / elaborate:	

17) What is your Company's policy for the future with regard to BBBEE?

18) How does your Company intend to abide by this policy for the future with regard to BBBEE?

19) How would you encourage transformation (BBBEE) within your Company?

Focus on advertising	
Head-hunting	
Organizational Development	
Internal Promotion	
Recruitment (Universities, Technicons, Colleges and Schools)	
Other	
If other methods are used, please describe:	

20) Does your Company have any systems in place to promote the study of Science and Mathematics amongst school children?

	Yes		No
--	-----	--	----

21) Does your Company have any systems in place to identify any aspiring engineering students?

	Yes		No
--	-----	--	----

22) Does your Company have any systems in place to allocate bursaries to aspiring engineering students?

	Yes		No
--	-----	--	----

23) How long do you think would it take to develop or train PDI's / HDI's to enable your Company to have adequate numbers of previously disadvantaged personnel that can be appointed in senior Management positions?

	Less than 1 year		2 to 3 years
	3 to 4 years		4 to 5 years
	5 to 6 years		6 to 7 years
	7 to 8 years		8 to 9 years
	9 to 10 years		More than 10 years

C. Perceptions on Transformation

24) What is the general sentiment under the personnel in your Company with regard to the possibility of success through transformation?

	Totally Positive
	Positive
	Negative
	Totally Negative

25) What is the general sentiment under the personnel in your Company about transformation within the Company?

	Positive
	Opportunistic
	Neutral
	Negative
	Threatened
	Uncertain

- 26) What is the general sentiment under the personnel in your Company regarding the question: "How does Transformation influence your position within the Company you work for?"

	Positive
	Not so Positive
	Slightly Negative
	Negative
	Not at All
	Uncertain

- 27) Please organise the following statements with regard to the Organisational Climate created by Transformation within the Company.

People are Positive with regard to Transformation						
Totally agree 1	2	3	4	5	6	Totally disagree 7
People are Negative with regard to Transformation						
Totally agree 1	2	3	4	5	6	Totally disagree 7
People are apathetic / uninterested with regard to Transformation						
Totally agree 1	2	3	4	5	6	Totally disagree 7
People are annoyed with the cost of Transformation						
Totally agree 1	2	3	4	5	6	Totally disagree 7
Employees embrace Transformation in general						
Totally agree 1	2	3	4	5	6	Totally disagree 7

Appendix 3

(BBBEE Scorecard)



APPENDIX A

A balanced scorecard for Broad-Based Black Economic Empowerment

Introduction

To achieve our BEE objectives we need to have a consistency of approach, appropriate flexibility to respond to different economic and enterprise conditions and the ability to measure our progress. The negotiations around the Mining Charter provided a useful and pragmatic approach to these needs that will now be applied more generally.

Government will use a 'balanced scorecard' to measure progress made in achieving BEE by enterprises - and where sector-specific charters are developed, the terms set out in those charters will apply. The use of a common scorecard by different stakeholders provides a basic framework against which to benchmark the BEE process in different enterprises and sectors. The scorecard also allows government departments, state-owned enterprises, and other public agencies to align their own procurement practices and individual BEE strategies. The scorecard further facilitates the process of setting measurable targets for BEE, for BEE ratings and other measurement purpose.

The scorecard allows for a measure of flexibility so that it can be adapted to the particular circumstances of specific sectors or enterprises, while at the same time bringing a measure of standardisation to the definition and measurement of BEE.

Core components of BEE

The scorecard will measure three core elements of BEE:

- Direct empowerment through ownership and control of enterprises and assets,
- Human resource development and employment equity,
- Indirect empowerment through preferential procurement and enterprise development.

Direct empowerment

The process of BEE must result in an increase in the ownership and control of the economy by black persons. This means that a significant proportion of black persons' ownership of assets and enterprises must be a controlling interest, reflecting genuine participation in decision-making at board, executive management and operations levels, and the assumption of real risk.

In the scorecard, direct empowerment focuses on ownership of enterprises and assets through shares and other instruments that provide the holder thereof with voting rights and economic benefits, such as dividends or interest payments.

Control means:

- The right or the ability to direct or otherwise control the majority of the votes attaching to the shareholder's issued shares,
- The right or ability to appoint or remove directors holding a majority of voting rights at meetings of the board of directors of that shareholder,
- The right to control the management of that shareholder.

This emphasis on control does not detract from the important role that passive ownership of assets through pension and provident funds, unit trusts, and other collective investment schemes can play in BEE. However, passive ownership by black people is in itself not sufficient to bring about a real transformation of our economy. Without active participation in managing worker-owned funds, and similar investment instruments, investors have very little control over the direction of investment decisions made by fund managers. Passive ownership of enterprises can also lead to a form of 'fronting' and this needs to be guarded against.

Notes

Human resource development and employment equity

This component of the scorecard focuses on the development of the employees of an enterprise or sector as well as employment equity. Enterprises are required to comply with the provisions of the *Employment Equity Act* to bring about an equitable representation of black persons in all occupations and at all levels of the organisation over a period of time. The involvement of black persons in operational, professional cadres and executive decision-making is a critical aspect of BEE. Given the legacy of systematic labour market discrimination and inferior education, accelerated skills and advanced professional skill development is also important.

Indirect empowerment

In order to grow our economy, more enterprises are needed to produce value-added goods and services, to attract investment, and to employ more of our people in productive activities. Thus, a core component of the BEE strategy is the creation and nurturing of new enterprises by black people. Preferential procurement by both the State and the private sector is an effective and efficient instrument to drive BEE as it provides emerging black enterprises with opportunities to expand their output. The scorecard, therefore, includes a preferential procurement element.

A second element of indirect empowerment is enterprise development. This can take two forms:

- Investment in black-owned and black-empowered enterprises,
- Joint ventures with black-owned and black-empowered enterprises that result in substantive skills transfer.

Investment in black-owned and black-empowered enterprises is a crucial step in the provision of financial and intellectual capital to such enterprises. The key elements to be taken into account when making these types of investment are that there must be real economic benefit flowing to the recipient enterprise to enable it to be set up and run on a sustainable basis; effectively there must be resultant operational capacity from the investment into the enterprise; and, there must be active participation by black people in the recipient enterprise.

Joint ventures with black enterprises may involve processes such as outsourcing parts of the established enterprise's projects or jointly contracting for certain projects that will result in a transfer of skills to the black enterprise. The measure of the effectiveness of joint ventures is whether or not the black enterprise is able to perform the core elements of the joint projects on a stand-alone basis without compromising the competitive advantage contributed by either enterprise.

The residual 10% in the scorecard

In order to allow sectors and enterprises to tailor the scorecard to their circumstances, a residual 10% of the scorecard is left to sectors and enterprises to determine. Government encourages sectors and enterprises to consider including some of the following in their scorecards.

- Infrastructural support to suppliers and other enterprises in the same area or community,
- Labour-intensive production and construction methods,
- Beneficiation,
- Investment and support to enterprises operating in rural communities and the geographic areas identified in government's integrated sustainable rural development programme and urban renewal programme,
- Investment in the social wage of employees (for example, housing, transport, and health care).

Notes

Core component of BEE	Indicators	Conversion Factor	Raw Score	Weighting	Total Score
Preferential procurement	Procurement from black-owned and empowered enterprises as a proportion of total procurement	Target is 5 % of procurement in 3 years		20%	
		Conversion factor :			
	Year 1 - 3% Year 2 - 5%	$100/5 = 20$	$3\% \times 20 = 60\%$ $5\% \times 20 = 100\%$	$60\% \times 20\%$	12%

Weighting

The weighting of each component reflects the relative importance that government places thereon. The six core components of BEE are weighted to bring the scorecard to a maximum of 100%. The weightings total 100 in order to bring the scorecard to a standardised maximum score.

Total score

The total score will be calculated by the sum of the individual component scores and will be reflected as a score out of 100%.

Ranking enterprises using the scorecard

Using the scorecard as a guide, government will rank and categorise enterprises for the purposes of preferential procurement, restructuring of state-owned enterprises, financing and other kinds of support. The precise weighting and score will depend on the actual transaction and will be adjusted according to the economic, commercial and financial situation.

Government will use the total score to rank enterprises according to their progress in achieving broad-based black economic empowerment. The following are samples of categories for preferencing:

- Total score of **65% and above** – **good** contributor to broad-based BEE
- Total score of **40% to 64.9%** – **satisfactory** contributor to broad-based BEE
- Total score of **below 40%** – **limited** contributor to broad-based BEE

These rankings will be used to guide the direction of government support towards its BEE objectives. Preferential procurement policies and the qualifying criteria for government incentives and support schemes will be reviewed and, where appropriate, amended on a case-by-case basis to reflect these rankings.

Government will also encourage the private sector to develop similar ranking systems in sector and enterprise charters and to use these rankings in their procurement systems.

Appendix 4

(Construction Sector Broad-Based Black Economic Empowerment Framework)

**Construction Sector
Broad-Based Black Economic Empowerment Charter
Version 6 (Final)**

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1 PREAMBLE

- 1.1 Despite significant progress since the establishment of a democratic government in 1994, South African society is characterised by racially based income and social service inequalities. Consequently the vast majority of South Africans remain excluded from ownership, control and management of productive assets and from access to training in strategic skills.
- 1.2 This is not only unjust, but inhibits South Africa's ability to achieve its full economic potential.
- 1.3 Noting that:
 - 1.3.1 The Constitution of the Republic of South Africa, Act 108 of 1996, in inter alia section 9 on equality (and unfair discrimination) in the Bill of Rights, states the imperative of redressing historical and social inequalities; and
 - 1.3.2 The Broad-Based Black Economic Empowerment Act (No. 53 of 2003) establishes a legislative framework for the promotion of BBBEE, provides for the gazetting of transformation charters and empowers the Minister of Trade and Industry to issue codes of good practice;
- 1.4 The construction sector believes that positive and proactive response through the implementation of a Transformation Charter would address inequalities in the sector, unlock the sector's potential and enhance its growth.
- 1.5 We, the parties to this charter, therefore commit to actively promote a vibrant, transformed and competitive construction sector that provides adequate services to the domestic economy, reflects the South African nation as a whole, and contributes to the establishment of an equitable society.
- 1.6 The Construction Sector Transformation Charter:
 - 1.6.1 Constitutes a shared approach reflecting targets that are visionary and contain significant stretch to facilitate the rapid transformation of the construction sector, which all sector stakeholders hold, and establishes the principles upon which BBBEE should be implemented in the sector;
 - 1.6.2 Establishes targets and qualitative responsibilities in respect of each principle;
 - 1.6.3 Lays the basis for the development of a Code of Good Practice for the construction sector, as envisioned in the BBBEE Act;
 - 1.6.4 Applies to all stakeholders within the sector; and

- 1.6.5 Takes cognisance of differences between Contractors and Built Environment Professionals

2 THE CHALLENGES FACING THE CONSTRUCTION SECTOR

- 2.1 The construction sector, which consists of different disciplines with a proliferated client and supplier base, performs an indispensable role in the economy of South Africa and increasingly of the SADC region as a whole.
- 2.2 Over the past two decades the sector has experienced declining investment and increasing demand volatility, combined with an unstable employment environment. The sector growth trajectory is currently on an upward trend with expansion closely linked to new investment. It can therefore be a stimulus for development and job creation in the economy. These prospects present a considerable challenge to the construction sector to increase capacity and double output over the next decade.
- 2.3 The private sector has inadequately addressed BBBEE, generally implementing limited aspects in response to government tender requirements. Furthermore, the inconsistent interpretation of preferential procurement policy by client bodies has led to increased levels of legal uncertainty in enterprises and a narrow focus on equity ownership.
- 2.4 Save for a limited number of equity transactions, to date the sector continues to reflect vast inequalities in ownership, with little transformation having taken place.
- 2.5 Black participation is principally through micro and small businesses where there are also low levels of sustainability. There is little penetration of black enterprises in those components of the sector that are more capital and knowledge intensive. This situation is exacerbated by the absence of adequate financial and other support mechanisms for SMMEs and the sector's inbuilt bias towards urban centres of development.
- 2.6 There are limited numbers of black people, especially black women, in controlling positions, managerial positions and in the specialised professions in the larger enterprises in the sector.
- 2.7 There is a depleted skills base due to a number of factors including the disconnection of academia from the needs of the sector, the sector's lack of appeal as a career choice, the low numbers of school leavers with adequate grades in Mathematics and Science, low salaries and poor prospects for career advancement.

- 2.8 Exacerbating this problem is the inadequate investment in skills development across all levels in the sector, despite sufficient funding available from the Construction Education and Training Authority (CETA). Specific deficiencies include inadequate recognition of prior learning and low levels of workplace training.
- 2.9 This, together with inadequate working conditions, has created an environment of low productivity. Without decisive intervention from the sector, the disparity in black/white participation is likely to continue.
- 2.10 The public sector is a major client, whose lack of capacity in many areas and consequent inability to spend budgets has a profound impact on the sector.
- 2.11 The response by larger contractors to perceived labour market rigidity has resulted in a proliferation of labour-only sub-contractors and many of these are not compliant with labour and health and safety regulations. Labour-only sub-contractors also have reduced access to training and development to enable their growth and advancement.
- 2.12 Working conditions on some construction sites are unacceptably low; including factors such as extended periods away from home, long hours, unsafe working environments and inadequate housing arrangements.
- 2.13 There is a proliferation of construction sector associations, which creates inefficiencies and hampers the development of partnerships and the private sector's ability to communicate amongst themselves, with government and other stakeholders.

3 OBJECTIVES OF THE CHARTER

- 3.1 The charter provides a framework for the construction sector to address BBBEE, enhance capacity and increase the productivity of the sector to meet world best practice.
- 3.2 The charter aims to:
 - 3.2.1 Achieve a substantial change in the racial and gender composition of ownership, control, and management in the sector;
 - 3.2.2 Promote the effective advancement of employment equity in the sector and adherence to principles of non-racialism and non-sexism;
 - 3.2.3 Provide to the construction sector the first quantitative method for monitoring and evaluating the progress of an enterprise towards BBBEE and thereby contribute to ending the malpractice of fronting;

- 3.2.4 Expand the employment potential and absorption capacity of the sector using labour-intensive approaches where economically feasible and possible;
- 3.2.5 Address skills development in a manner that accelerates the advancement of black people, black women and designated groups with a particular emphasis on learnerships, technical and management training,
- 3.2.6 Increase the procurement of goods and services from BBBEE enterprises and standardise preferential procurement methodology;
- 3.2.7 Enhance entrepreneurial development and promote the sustainable growth of micro, medium and small BBBEE enterprises;
- 3.2.8 Devise mechanisms to bring about the formalisation of labour-only contractors, ensure that they participate in training and abide by all relevant legislation and regulation aimed at protecting their rights, improving workplace conditions and the safety of labour;
- 3.2.9 Encourage adherence to triple bottom-line accountability and fair labour practices, through employment equity, skills development and CSI interventions;
- 3.2.10 Improve the capacity of the public sector to deliver, by promoting greater partnership with government in developmental initiatives, especially in under-resourced areas, as enhanced delivery by the public sector will play a crucial role in facilitating growth of the sector; and
- 3.2.11 Lay the foundations for the integration of construction sector associations to create efficiency promote a shared vision and enhance the sector's ability to communicate with government and other stakeholders.

- 3.3 As the targets are visionary and contain a lot of "stretch" it is imperative that all stakeholders within the industry have efficient communication channels to work effectively together.
- 3.4 In addition, companies will need to be able to expand their business in order to achieve the targets and the construction sector must therefore develop the necessary capacity to facilitate this. Government delivery will play a crucial role in facilitating this growth.

4 APPLICATION AND REPORTING

- 4.1 This charter applies to all enterprises that are involved in the creation, expansion, and/or maintenance of fixed assets related to residential or non-residential buildings, infrastructure, or any other form of construction works in South Africa.
- 4.2 If within the registered construction enterprise over sixty percent of its core activities are in construction, the enterprise will be required to report on all the activities, provided those are not located within a separate business unit or subsidiary. If the latter is the case then the principles of the Codes of Good Practice of the relevant sector code, will apply.
- 4.3 The Construction Charter Council will be established to oversee and monitor the implementation of the charter. It shall be a representative structure comprised of all stakeholders in the sector, supported by staff that has significant direct experience in the construction industry. It will act with executive capacity and provide the necessary links to relevant government institutions such as CIDB, NHBRC, IDT, DTi and verification agencies.
- 4.4 Each enterprise will submit an independently audited report from an accredited verification agency annually to the sector Charter Council. The report, which will be publicly accessible, must contain the enterprise's scorecard and an account of progress in achieving the qualitative undertakings outlined in this charter.
- 4.5 The first annual report will be for the year ending 31 December 2006, and must be submitted to the Charter Council by 31 March 2007. Thereafter each enterprise will report as at 31 December each year and submit the report by 31 March of the following year.
- 4.6 During the transitional phase enterprises will be measured using the relevant guidance rule provided by the IMC.
- 4.7 *The Charter Council should evaluate the targets and other mechanisms contained in the charter after three years and take appropriate action. The cumulative progress of the sector, captured through performance on the scorecard, will be used as the yardstick for the evaluation.*
- 4.8 A comprehensive review of the impact of the charter will be undertaken after seven years.
- 4.9 All the provisions of the charter are to be achieved in a manner consistent with sound business and governance practice.
- 4.10 Differences relating to type of enterprise are accommodated in the application of the scorecard.

- 4.11 All micro enterprises are exempt from the requirement to have a BBEE verification certificate and will be allocated a BBEE status of Level 4 and will receive recognition as per the BBEE Status table contained in the Charter.
- 4.12 Small enterprises will be measured on a simplified basis, scoring out of 70 on the construction scorecard and will receive the recognition indicated in the BBEE Status table contained in this Charter, as per the principles contained in the DTi codes to promote small enterprises.
- 4.13 All construction sector enterprises claiming exemptions from any provision of the charter, must submit to the Charter Council evidence supporting the exemption, together with the annual BBEE report.

5 ELEMENTS OF BROAD-BASED BLACK ECONOMIC EMPOWERMENT

The stakeholders commit to attain the objectives outlined in the respective elements listed below by applying the methods, mechanisms and principles agreed.

5.1 OWNERSHIP

- 5.1.1 The construction sector will base its measurement of ownership on the provisions of the DTi Code of Good Practice, Code 100 Statement 100 and the following:
 - o The definition of excluded equity will include pension funds and collective investment schemes and will flow down through the organisation irrespective of the level at which ownership is measured;
 - o Ownership related to broad based ownership will be viewed as unencumbered.
- 5.1.2 To date the sector continues to reflect vast inequalities in ownership, with black participation primarily at the micro and small business level. Consequently, the Charter aims to achieve a substantial change in the racial and gender composition of ownership.
- 5.1.3 Enterprises in the construction sector therefore commit to achieve the following ownership targets by Dec 2013 (in seven years):
 - o 30% economic interest held by black people and 30% participation by black people in voting rights;
 - o 10% economic interest held by black women and 10% participation by black women in voting rights;

- o 10% (5% for BEPs) economic interest held by black broad based groups and or black designated groups, specifically black employees.

5.1.4 All construction sector enterprises are bound by the ownership requirements of this charter except as specified elsewhere in this document.

5.1.5 If, in terms of a global policy to which a local multinational enterprise is subject, it is prevented from accommodating local ownership participation, those enterprises will be entitled to apply to the Minister of Trade and Industry and the Minister of Public Works for the recognition of equity equivalents. The Construction Charter Council will submit recommendations on what these equity equivalents should encompass to the Minister of Trade and Industry.

5.2 CONTROL

5.2.1 Black people and black women in particular continue to be under-represented at board level and in executive management in the sector

5.2.2 Enterprises in the sector therefore commit to achieve the following targets by:

5.2.2.1 Dec 2013 (in seven years):

- o 40% black people at board level;
- o 20% black women at board level;

5.2.2.2 Dec 2010 (in four years) and Dec 2013 (in seven years) respectively:

- o 25%/40% black people at executive management level;
- o 10%/16% black women at executive management level.

5.3 EMPLOYMENT EQUITY

5.3.1 Notwithstanding the Employment Equity Act, racial and gender representivity in the sector, especially in the various management categories, remains symptomatic of apartheid discriminatory policies.

5.3.2 Consequently, enterprises in the sector commit to achieve the following targets by:

5.3.2.1 Dec 2010 (in four years) and Dec 2013 (in seven years) respectively:

- o 25%/40% black people in Senior Management;
- o 10%/16% black women in Senior Management;
- o 30%/40% black people in Middle Management;
- o 12%/16% black women in Middle Management;

o For BEPs a single combination target as follows:

- o 30%/40% black people at all management levels;
- o 12%/16% black women at all management levels;

5.3.2.2 Enterprises in the sector commit to achieve the following targets by Dec 2013 (in seven years):

- o 65% black people in Junior Management; and
- o 27% black women in Junior Management.

5.3.3 The parties to the charter undertake to promote non-racial, gender sensitive workplaces, which provide decent work, observe fair labour practices, respect environmental sustainability and enhance cultural diversity.

5.3.4 Enterprises in the sector will submit their employment equity plans and certificates of compliance, with their annual BBBEE reports. Non-compliance with the statutory and administrative requirements of the Employment Equity Act 55 of 1998 will result in a zero score for employment equity.

5.4 SKILLS DEVELOPMENT

5.4.1 The construction sector consists of a large low-skilled labour force and limited numbers of highly skilled professionals, which are in short supply. Despite this, enterprises are not adequately investing in skills development.

5.4.2 Consequently, enterprises in the sector commit to achieve the following targets:

- o 1.5% of payroll per annum on skills development;
- o 70% of total skills development spend on black people;
- o 25% of skills development spend on black people spent on black women;
- o 25% of skills development spend on black people spent on black management;
- o 20% of skills development spend on black management spend on black women management;
- o 2.5% (1.5% for BEPs) of employees on learnerships calculated as a rolling 12 month average;
- o 70% of Total learnerships on black people;
- o 35% of Learnerships on black people must be black women; and

- o 30% of Learnerships on black people *must* be from designated groups
 - o 0.3% of payroll on bursary expenditure on black students.
- 5.4.3 In addition to meeting the above targets, enterprises in the sector will:
- o Implement an approved and verified mentorship programme; and
 - o Comply with the Skills Development Act and include proof of submission of a work place skills plan and implementation report in the annual BBBEE report. Non-compliance with the requirements of the Act will result in a zero score for skills development; and
- 5.4.4 The Charter Council should monitor the development of the relevant unit standards for learnerships and revise the relevant targets after 3 years if the appropriate standards have not been developed timeously by the relevant SETA;
- 5.4.5 In its efforts to address skills development comprehensively and to improve *the institutional framework, the sector undertakes to:*
- o Promote awareness of career opportunities in the construction sector and provide educational/career guidance aimed at increasing the success rate of students in the construction fields through access to experiential training opportunities and other interventions.
 - o Establish ordered interaction between the sector, the relevant SETA and tertiary institutions to foster appropriate skills transfer and facilitate the accreditation of various workplace skills training initiatives.
 - o Increase the level of retention through effective workplace training, career path development and effective succession planning.
 - o Through the Charter Council, develop a mechanism to certify in-house training and recognition of prior learning of employees where the *enterprise is not a certified training provider. This will enable workers to receive certification for the various levels of the particular trade or trades in which they work thereby enhancing their mobility in the sector and the possibility of attracting rates-of-pay commensurate with their abilities.*

5.5 PROCUREMENT

- 5.5.1 To date the sector has not effectively implemented preferential procurement practices.

5.5.2 In addition to the exclusions noted in the definition of procurement, the BEPs will be permitted to exclude restricted specialist services and current facility rental contracts. This relaxation will be for contracts signed before the 1st of November 2005 and will be for a maximum period of the current contracts and will exclude any extended and or altered contract conditions. The BEPs will make every effort to influence transformation in the supplier prior to the completion of the current contract period.

5.5.3 Enterprises in the sector therefore commit to achieve a weighted target of procurement spend from BBBEE suppliers of 70% by Dec 2013 (in seven years):

- 5.5.4 In addition to the targets the parties to the charter undertake to:
- o Develop and implement targeted procurement policies, including promoting accessibility of tendering opportunities, early payment cycles and other supply side interventions for micro and small enterprises;
 - o Implement mechanisms to counter fronting and the abuse of targeting arrangements;
 - o Promote compliance to the Broad Based Black Economic Empowerment Act amongst their suppliers by assessing the supplier in terms of their relevant sector charters where these exist as codes of good practice and in terms of the generic scorecard where they do not; and
 - o Enhance benefits to local communities, target, where appropriate, procurement from local enterprises, specifically micro and small enterprises with black ownership exceeding 50%.

5.5.5 Procurement from suppliers of goods and services should be measured against the following matrix:

BBBEE Status	Qualification	Weighting Recognition
1	≥ 100 points (or percentage relevant to small)	135%
2	≥ 85 but < 100	125%
3	≥ 75 but < 85	110%
4	≥ 65 but < 75 or any micro enterprises	100%
5	≥ 55 but < 65	80%
6	≥ 45 but < 55	60%
7	≥ 40 but < 45	50%
8	≥ 30 but < 40	10%
9	< 30	0%

Where any enterprise is in excess of 50% owned by black people, the BBBEE status of that enterprise will be at the level immediately above the level at which its actual score is evaluated.

5.6 ENTERPRISE DEVELOPMENT

- 5.6.1 Numerous micro and small businesses enter the sector. However, many of these are unable to sustain business operations beyond their first year.
- 5.6.2 Some organisations have set up supplier or service provider development initiatives, which include guiding, mentoring, coaching, tendering, tender advice and in some cases direct investment into SMME's.
- 5.6.3 Through enterprise development the charter aims to establish a framework for co-ordinated development of micro, small and medium enterprises to ensure higher levels of sustainability and increased levels of black ownership in the sector. Enterprise development should also support the development of women owned and managed businesses.
- 5.6.4 The enterprise development programmes' should include the following:
- o Management and labour skills transfer;
 - o Establishment of administrative systems;
 - o Establishment of cost control systems;
 - o Planning, tendering and programming skills transfer;
 - o Business skills transfer with emphasis on entrepreneurial and negotiation skills;
 - o Technical skills transfer with emphasis on innovation;
 - o Legal compliance skills transfer;
 - o Procurement skills transfer;
 - o Assistance in establishing credit rating/history;
 - o Assistance in establishing financial and loan capacity/history;
 - o Contractual knowledge transfer; and
 - o A champion for enterprise development.
- 5.6.5 Enterprises in the sector will target a percentage of total annual turnover of the developing organisation as a percentage of total annual turnover of the established organisation of 5% by Dec 2013 (in seven years)

- 5.6.6 The sustainability and operational independence of the enterprises being developed will be measured over time against a range of indicators, which provide an assessment of the enterprise's growth as a result of the enterprise development programme. These include: annual turnover, growth in cost of employment total value of assets, tax and regulatory compliance and improvement in ability to access credit facilities.
- 5.6.7 Enterprises in the sector will prioritise the development of enterprises participating in the construction sector, as well as those that undertake similar activities to themselves and in the fields where they have experienced and expert personnel. Consequently, the following target categories can be identified:
- Category 1: Suppliers – suppliers of construction equipment, construction materials, hired plant/machinery and formwork and the like e.g. stationary, cleaning materials, electronic equipment etc.
- Category 2: Professional service providers – auditing and financial service providers, legal services, services in the built environment professionals (architects, environmental consultants, engineering consultants, quantity surveyors, town planners, land surveyors, geologists, material testing laboratories and other specialist consultants etc).
- Category 3: Built environment service providers – contractors, (building, interior decorators, painting, civil, mechanical, electrical, electronic) specialist sub contractors. (Geotech, piling, asphalt, landscaping, fencing)
- Category 4: Outsourcing and possible privatisation of certain functions that are still being done within the established or parent organization such as: internal bus transport services, internal construction and maintenance units.
- 5.6.8 Companies that are currently mentoring other organisations will be able to transfer these organisations to the new framework if so desired. The history of mentorship in these instances can be evaluated in strict accordance with the set criteria and a credit recorded for the work done up to the start of the first reporting period by the mentor company.

5.7 CORPORATE SOCIAL INVESTMENT (CSI)

- 5.7.1 The construction sector has the opportunity to significantly increase the amount and effectiveness of CSI in the industry.
- 5.7.2 The parties to this charter commit to utilising the resources at their disposal to initiate and contribute to CSI projects and registered development oriented NGO's that primarily benefit black people and that promote development in under resourced areas.
- 5.7.3 Each enterprise will achieve a target of 0.25% by Dec 2013 (in seven years) of annual payroll on CSI, which will be split between general CSI and sector specific projects.
- 5.7.4 The CSI spend in any corporation will flow through from holding company to operational companies or from operational companies to the holding company on a see through basis.
- 5.7.5 The Charter Council will set guidelines on the definition and measurement of sector specific projects.
- 5.7.6 Sector specific projects could include but are not limited to:
- o Social infrastructure development in areas where large construction projects are taking place;
 - o Labour intensive construction methods;
 - o Promotion of and support for the development of women across the sector;
 - o Support to a Construction Advice Centre;
 - o Support the construction of clinics, schools and lower income/affordable housing where appropriate;
 - o Sector-focused education and training: support for education and training to increase the participation of black people in the sector; and
 - o Capacity building support for Local Authorities
- 5.7.7 General CSI projects may include but will not be limited to:
- o Community education and training: support for community education facilities, community training, skills development for unemployed, adult basic education and training in communities;
 - o Support of sector specific career guidance and maths and science initiatives in schools;

- o Contributions to and participation in development support initiatives;
- o Development programmes for youth and other target groups;
- o Environment: support of conservation projects, community clean up projects, food garden initiatives;
- o Arts & Culture: support of development programmes, development of new talent;
- o Health: support of community clinics, health programmes in the community;
- o Sport: support of development programmes; and
- o HIV and AIDS programmes

5.7.8 In the planning of CSI projects, to optimise assistance, the parties undertake to:

- o Consult with beneficiary communities to ensure that their developmental needs will be met;
- o Seek industry and government partnerships;
- o Support projects in communities where construction activity is taking place; and
- o Ensure the negative environmental impacts of construction activities are minimised.

6 REGULATORY ISSUES

- 6.1 The parties to the charter commit work with the Charter Council to review and provide comment on an ongoing basis on any legislation, policy and standards, which may have a direct impact on the empowerment outcomes of the charter.

7 THE SCORECARD

- 7.1 The scorecard provides an objective and broad-based set of measurement indicators for purposes of measuring BBBEE progress in and between construction enterprises, in different sub-sectors and in the construction sector as a whole.
- 7.2 In its entirety the scorecard and all inputs and elements captured in the scorecard pertains to South African operations.

- 7.3 Calculations will be consistent with the application of the flow-through and modified flow-through as well as control principles as contemplated in the DTi Code of Good Practice.
- 7.4 The flow-through from holding company to operational companies or divisions must be carefully considered for every element of the scorecard. This will allow for a score at operational level to be supplemented with a score from the holding company e.g. CSI.
- 7.5 The scorecard contains the following:
- 7.5.1 Elements: The core elements of the charter, derived from the BBBEE Act and Codes of Good Practice issued in terms of the Act;
 - 7.5.2 Indicators: The area of measurement pertaining to an element of BBBEE;
 - 7.5.3 Weightings: A number on the scorecard against which an enterprise's performance in terms of a particular target will be calculated; and
 - 7.5.4 Targets: Quantifiable measurement of transformational initiatives;
- 7.6 The scorecard score will for public sector related procurement, directly determine the preferred points obtained out of the potential 10 or 20 in the 90/10 or 80/20 in the preferential procurement evaluation in accordance with the requirements of the preferential procurement regulations, 2001 pertaining to the PPPFA: no 5 of 2000 as amended.
- 7.7 The BBBEE status of a construction sector enterprise, after calculating its score in terms of this scorecard, will be classified in terms of the following:
- 7.7.1 "Level 1" contributor – Total score of 100% and above;
 - 7.7.2 "Level 2" contributor – Total score of 85% and above but less than 100%;
 - 7.7.3 "Level 3" contributor – Total score of 75% and above but less than 85%;
 - 7.7.4 "Level 4" contributor – Total score of 65% and above but less than 75%;
 - 7.7.5 "Level 5" contributor – Total score of 55% and above but less than 65%;
 - 7.7.6 "Level 6" contributor – Total score of 45% and above but less than 55%;
 - 7.7.7 "Level 7" contributor – Total score of 40% and above but less than 45%;
 - 7.7.8 "Level 8" contributor – Total score of 30% and above but less than 40%;
 - 7.7.9 "Level 9" contributor – Total score less than 30%.
- 7.8 Where any enterprise is in excess of 50% owned by black people, the BBBEE Status of that Enterprise will be at the level immediately above the level at which its actual score is evaluated.

- 7.9 In the scorecard the following provision has been made for target and weighting variations to accommodate the differences between the contracting and built environment professional fraternities. The variations for the BEPs are as follows:
- A single combination target for black people and black women on management (employment equity);
 - A target of 5% relating to economic interest to which designated groups are entitled (ownership);
 - A target of 1.5% for learnerships a percentage of employees (skills development);
 - The weighting for Skills Development will be 20 with sub-weightings adjusted on a pro-rata basis and the weighting for Enterprise Development will be 10 with sub-weightings as indicated in brackets in the scorecard.

THE CONSTRUCTION SECTOR SCORECARD				
		WEIGHTING	TARGET 4/7 YEAR*	TARGET VARIATIONS
OWNERSHIP		25		
Voting rights	Voting rights in the hands of black people	4	30	
	Voting rights in the hands of black women	2	10	
Economic interest	Economic interest to which black people are entitled	5	30	
	Economic interest to which black women are entitled	2	10	
	Economic interest to which black broad based and or black designated groups, specifically employees, are entitled	5	10	5
Realisation points	Ownership fulfilment	1	No restrictions	
	Net equity value (In accordance with code 100 of DTI Code of Good Practice)	6	30	
CONTROL		10		
Board	Members of the board who are black people as % of board	3.5	40	
	Members of the board who are black women as % of board	1.5	20	
Executive Management	Executive Management who are black people as % of Executive Management	3.5	25/40	
	Executive Management who are black women as % of Executive Management	1.5	10/16	
EMPLOYMENT EQUITY		10		
Senior Management	Black Senior Management as % of total senior management	2	25/40	
	Black women in Senior Management as % of total senior management	1.5	10/16	
Middle Management	Black middle management as % of total mid management	2	30/40	
	Black women in middle management as % of total mid management	1.5	12/16	
Junior Management	Black junior management as % of total junior management	2	65	
	Black women in junior management as % of total junior management	1	27	
BEPs – All Management	Black people at all management levels	6	30/40	
	Black women at all management levels	4	12/16	
SKILLS DEVELOPMENT		15 (BEPs 20)		
Training costs	Direct training cost as a % of payroll	2	1.5	

	% of above on black people	2	70	
	% of spend on black people spent on black women	1	25	
	% of spend on black people spent on black management	1	25	
	% of spend on black management spent on black women management	0.5	20	
Learnerships	Learnerships as a % of employees	1	2.5	1.5
	Black learnership positions as % of total learnerships	1.5	70	
	Black women learnership positions as % of black learnerships	1	35	
	Learnerships for black designated groups as % of black learnerships	1	30	
Bursaries	Bursary expenditure on black students, as % of payroll *	2	0.3	
Mentorship	Implementation of an approved and verified mentorship programme	2	Yes	
PROCUREMENT		20		
	Total weighted procurement on BBEE-accredited companies (measured as per the table in the charter) as a % of procurement		70	
ENTERPRISE DEVELOPMENT		15 (BEPs 10)		
	Input	5 (5)	Yes/No	
	Total Turnover Ratio	5 (2.5)	5	
	Output	5 (2.5)	Annual GDP Growth	
RESIDUAL		5		
	CSI as a percentage of payroll		0.25%	

* 4 Year targets are applicable up to 31/12/2010 thereafter the targets revert to the seven year target

8 DEFINITIONS

Acceptable Valuation Standard	Valuation of an asset, an Economic Interest, an Enterprise or any other instrument or right relevant to measurement under Statement 100 of the Codes. All such valuations shall be undertaken in accordance with normal valuation methodologies that represent standard market practice;
Accredited Verification Agencies	Enterprises that have been accredited by SANAS on behalf of the dti to provide an independent opinion on the broad-based economic empowerment status of enterprises.
Associated Enterprise	Means any enterprise other than the measured enterprise with which the measured enterprise has concluded a qualifying transaction.
BBBEE Enterprises	Enterprises whose BBBEE score in terms of a sector scorecard which has been issued as a code of practice or in terms of the dti's generic scorecard has been verified by an accredited verification agency.
BEP	Built in environment professionals which includes quantity surveyors, consulting engineers, architects, town planners, etc.
Black Aged People	Black people who are also aged people as defined in the Aged Persons Act 81 of 1967, as amended or substituted;
Black Designated Groups	Black workers, black unemployed people, black youth, black aged people, black disabled people and black people living in rural areas
Black Disabled People	Black people who also satisfy the criteria in the definition of 'persons with disabilities' set forth in paragraph 5.1 of the "code of good practice on the employment of people with disabilities" (as amended or substituted from time to time) issued in terms of section 54(1)(a) of the Employment Equity Act;
Black Unemployed People	Black people who are unemployed, are not attending or are not required by law to attend an educational institution and who are not awaiting admission to an educational institution.
Black Women	Black people who are women.
Black Workers	Black people who are also employees as defined in the Employment Equity Act but specifically excludes senior managerial staff as contemplated in section 78 of the Labour Relations Act 66 of 1995 as amended or substituted;
Black Youth	Black persons who are also youth as defined in the National Youth Commission Act 19 of 1996, as amended or substituted;
Black New Entrant	A black participant(s) (which includes without limitation, black participants in broad-based ownership schemes) holding in aggregate in excess of 5% of the total voting rights and economic interest in a measured enterprises who has not, prior to their acquisition of their equity interest in a measured enterprise, concluded similar transactions in respect of any other enterprise, which in aggregate have a cumulative value of R20 million measured in accordance with an acceptable valuation standard.
Black People	Africans, Coloureds and Indians in terms of the BBBEE Act, 53 of 2003 and read in conjunction with the definition in the code of good practice issued by the DTI, which limits the definition to natural persons who are citizens of the Republic of South Africa by birth or by descent as well as natural persons who acquired citizenship by naturalisation prior to the commencement of the Interim Constitution

Broad-based Black Economic Empowerment	The economic empowerment of all black people including women, workers, youth, people with disabilities and people living in rural areas through diverse but integrated socio-economic strategies that include, but are not limited to – Increasing the number of black people that manage, own and control enterprises and productive assets; Facilitating ownership and management of enterprises and productive assets by communities, workers, co-operatives and other collective enterprises; Targeted procurement; and investment in enterprises that are owned or managed by black people; Human resources and skills development; Achieving equitable representation in all occupational categories and levels in the workforce; Facilitating the provision of additional skills to black employees at all levels in the workforce.
Broad-based ownership scheme	A justic person, a trust or a common law association of persons constituted with the view to facilitating the participation of specified natural persons in the benefit flowing from the ownership by that scheme or it fiduciaries of an Equity Interest in an Enterprises(s). In relation to this definition, the following additional definitions of Ownership Scheme are provided: Distribution Scheme means a Broad-Based Ownership Scheme whereby a broad base of natural person (such as a community or a broad-based group of natural persons including, without limitation, black women and black designated groups) are intended to received distributions from the Scheme payable from Economic Interest received by the scheme or the fiduciaries of the scheme; and "Benefit Scheme" means a Broad-Based Ownership Scheme whereby a broad base of more than 50 natural persons (such as a community or a broad-based group of natural persons including, without limitation black women and black designated groups) are intended to benefit from Economic Interest received by the scheme or the fiduciaries of the scheme without their actually receiving distributions payable from such Economic Interest.
Bursary expenditure	All expenditure including peripheral and residential costs related to intenal bursaries where the enterprise enters into a contractual employment relationship with the learner/student. All other bursaries will be counted under CSI.
CETA	Construction Education and Training Authority
Construction Sector	All enterprises that are involved in the expansion/creation and/or maintenance of fixed assets related to residential or non-residential buildings, infrastructure, or any other form of construction works in South Africa. This includes, but is not limited to: residential and non-residential building contractors and built environment consultants.
Contractor	Any natural or legal person whose tender has been accepted by the enterprise.
Corporate Social Investment	CSI projects are those that are aimed primarily at black groups, communities and individuals that contribute towards transformation and have a strong developmental approach.
Control Principle	Notwithstanding the provision (2)(as specified in Code 100 of the DTI Code of Good Practice) under the modified flow-through principle, in certain specified circumstances and only in relation to the exercisable voting rights, this following control principle shall be read in conjunction with the flow-through principle: Where upon examination, a chain of

	ownership as contemplated in (2) (as specified in Code 100 of the DTI Code of Good Practice) under the modified flow-through principle, reveals that the ultimate black participants in a measured enterprise, are entitled to exercise a sufficient number of exercisable voting rights so as to retain control across one or more juristic person in that chain, the measured enterprise will be entitled to treat each such black majority controlled juristic person other than the juristic person most approximate to the ultimate black participants as if those black majority controlled juristic persons were juristic persons in which black people held 100% of the exercisable voting rights.
Deemed Participant	A natural person member, shareholder, beneficiary or other natural person entitled to receive a distribution or a benefit from a Broad-Based Ownership Scheme or a trust. The terms "distribution" and "benefit" are to be interpreted with reference to the definitions provided in respect of Broad-Based Ownership Schemes.
Direct Training Cost	The direct cost, excluding peripheral costs, incurred by a company for accredited or sector acknowledged training and development including costs related to learnerships and bursaries and excluding the skills levy as per the skills development legislation.
Disabled person	An individual who has a disability and as a result suffers from loss or limitation of opportunity to take part equally with others or to contribute in equivalent measure to such opportunity, in the context of any activity relating to the execution of a Contract or the services to be provided there under.
Economic Interest	A Participant's Claim against a Measured Enterprise which represents his/her return on his/her ownership in that Measured Enterprise as recognised using the Flow-Through and Modified Flow-Through Principles, provided that: (a) to the extent that the provisions of paragraphs 9 – 13 (as specified in Code 100 of the DTI Code of Good Practice) provide further definition as to the nature of an Economic Interest in an Enterprise other than a company having share capital, those provisions must be read in conjunction with this definition in relation to such Enterprises; and (b) a Participant's entitlement to receive any payment or part payment on his/her Participant's Claim from the Measured Enterprise that is not in the nature of a return on his/her ownership in that Measured Enterprise, will be treated as an Economic Interest if such payment is not arms-length, is not market related, is male fide, is without a commercial rationale and/or is intended to achieve a circumvention of the provisions of this Statement or the objectives of the Act
Element	The measurable quantitative or qualitative elements of BEE compliance specified in Code 000, Statement 000 of the DTI Codes of Good Practice
Enterprise	The person(s) conducting a business, trade or profession in the Republic of South Africa and specifically includes, without limitation, any form of co-operative society;
Equity Interest	The collective term referring to the entitlement of a Participant to receive Economic Interest and to exercise Voting Rights in an Enterprise provided that, to the extent that the provisions of paragraphs 9 – 13 (as specified in Code 100 of the DTI Code of Good Practice) provide further definition as to the nature of an Equity Interest in an Enterprise other than a company having share capital, those provisions should be read in conjunction with this definition in relation to such Enterprises;

Exercisable Voting Right	A Voting Right of a Participant that is fully exercisable without any limitation upon that right. For the avoidance of uncertainty, where a black Participant having a Voting Right in a Measured Enterprise is: (a) not permitted to exercise that Voting Right by reason of some condition or circumstance relating to the terms upon which that Participant's acquisition of the Equity Interest to which the Voting Rights attach was financed or to the provisions of any agreement concluded between the Participants in the Measured Enterprise, that Participant shall be deemed for the purposes of measurement under this Statement to have no Exercisable Voting Rights; and (b) prohibited from appointing directors (or similar owner appointed management) to the Enterprise in which he/she enjoys his/her Voting Rights in number, pro rata to his/her entitlement to Voting Rights, that Participant shall be deemed for the purposes of measurement under this Statement to have no Exercisable Voting Rights;
Effective Date	The first day of January 2006.
Employment Equity	As defined in the Employment Equity Act (1998) means to promote equal opportunity and fair treatment in employment through the elimination of unfair discrimination and the implementation of affirmative action measures to redress the disadvantages in employment experienced by designated groups, in order to ensure their equitable representation in all occupational categories and levels of the workforce. It obliges employers with over 50 employees to prepare Employment Equity plans and report on a yearly or bi-yearly basis to the Department of Labour (DoL).
Enterprise	Person(s) conducting a business, trade or profession in the Republic of South Africa, which is recognised in terms of the laws of the Republic, whether or not such enterprise is incorporated.
Enterprise Development	The development of black owned enterprises (i.e. 50% plus one share) through investment, mentoring, skills development, systems transfer.
Flow-through Principle	The principle which determines the entitlement of black people, black women and black designated groups to exercise voting rights in an enterprise or to share in the economic interest of an enterprise. Regard is had solely to voting rights and/or economic interest to which black people, black women and black designated groups (as the case may be) who are natural persons are entitled. In cases where an entitlement to voting rights and/or economic interest is held by juristic persons, regard will be had to voting rights and/or economic interest to which black people, black women and black designated groups (as the case may be) who are natural persons, are entitled, in that juristic person. The same principle will apply throughout the chain of ownership by juristic persons, until such time as that chain terminates in a natural person who is a black person, or who represents black women or black designated groups (as the case may be). The natural black person(s) shall be entitled to such voting rights and/or economic interest.
Fronting	Any entity, mechanism or structure established in order to circumvent the BEE requirements as required under various policy instruments. Fronting structures generally claim a higher BEE status than the actual substantive economic benefits flowing to black beneficiaries would suggest.
Generic Scorecard	The balanced BEE scorecard included in Code 000 Statement 000 of the DTI Codes of Good Practice

Joint Venture	Joint ventures are, normally, unincorporated bodies, regarded in law as partnerships in which the partners are jointly and severally liable for the acts, neglects and omissions of the partnership. A joint venture is a venture normally formed ad-hoc for a specific project, in which two or more parties share the obligations, risks and rewards.
Learnship	As defined in the Skills Development Act, a structured learning component which includes practical work experience of a specified nature and duration and which leads to a qualification registered by the South African Qualifications Authority and related to an occupation; and would be registered with the Director-General in the prescribed manner.
Management	Executive management includes the CE, CEO, MD, CFO, executive directors and those managers who have a significant leadership role in the enterprise, have control over day-to-day operations, have decision-making powers and report directly to the Chief Executive Officer, Managing Director and/or equivalent or the Board of Directors; Senior Management are the heads of major functions not represented on the main board and within executive management and who are responsible for programming decisions; Middle Management are the professionally qualified and experienced specialists in an enterprise who are responsible for interpretive decisions; Junior Management are the skilled, technical & academically qualified employees, supervisors, foremen and superintendents, who make routine and process decisions.
Measured Enterprise	An Enterprise subject to measurement under this Charter;
Mentorship	The process of assisting others to gain further knowledge, experience and skills; it is an activity that can be successfully used where senior employees develop people within a company to enhance their job development.
Modified Flow-Through Principle	A measured enterprise will be awarded points in the scorecard through the holding of an equity interest by black people in the measured enterprise and through the holding of equity interest by black people in an associated enterprise with which the measured enterprise has concluded a qualifying transaction. Voting rights and economic interest held by black people are only measurable if their ownership is linked to the ownership of the instrument/or rights to which they attach. Accordingly, where a black person owns a voting right and economic interest but does not own the share to which such voting right and economic interest attach in a company with shareholding, those voting rights and economic interest shall not be measured. Notwithstanding the provisions of (2)(as specified in Code 100 of the DTI Code of Good Practice) above, in certain specified circumstances and only in relation to economic interest, the modified flow-through principle shall be read in conjunction with the flow-through principle: Where in a chain of ownership as contemplated in (1)(as specified in Code 100 of the DTI Code of Good Practice) above, there is interposed between a measured enterprise and its ultimate black participants one or more juristic persons in which the natural persons enjoy an entitlement to economic interest which is in excess of 50% of the total entitlement to economic interest in that juristic person(s), the measured enterprise will be entitled to treat one black majority owned juristic person in that chain as being a juristic person in which 100% of the economic interest accrues to black people. With regard to this modified flow-through principle, and for a period of 5 years (or such

	longer period as may be specified in regulations issued in terms of section 14 of the Act) following the later occurring of the date of commencement of a transaction in terms of which black ownership has been introduced into the measured enterprise and the date of commencement date of Statement 100 (DTI Code 100), the modified flow through principle shall apply to all measured enterprises.
Net Equity Value	Equity interest that actually vests in the hands of participants after debt or other financial instruments have been paid off and as per the calculation in Code 100, statement 100, paragraph 32 of the DTI Codes of Good Practice.
Operational Company	Includes all subsidiaries or associate companies as defined in the Companies Act.
Ownership	Ownership of an equity interest in an enterprise.
Ownership Fulfillment	The situation where a black Participant has been completely released from all third party legal or commercial rights designed to reserve to any third person or to withhold, defer or restrict the enjoyment by that Participant of the benefits of that Economic Interest, whether generally, or specifically, or for a fixed period, or until or upon the occurrence of some event. For the avoidance of uncertainty: (1) a "third party legal or commercial right" shall be limited to rights created primarily as a means to secure for a lender payment of a loan or similar/equivalent financing arrangement advanced to the Participant for the purposes of acquiring an instrument to which the effected Economic Interest attaches; (2) where no such third party legal or commercial rights exist, black Participants will be deemed to be completely released from any such rights; and (3) a third party right against an Enterprise between the Measured Enterprise and the ultimate black Participant, and which was created primarily as a means to secure payment of a debt arising from the acquisition of the instrument through which the ultimate black Participant's interest in the Measured Enterprise is achieved, shall be deemed to be a third party right against that black Participant.
Participant	Means a natural person having an Equity Interest in an Enterprise
Payroll	All expenditure related to compensation of employees taxed in South Africa, including temporary employees and contract workers.
Procurement	All expenditure on suppliers for goods and services, including capital expenditure and excluding procurement on items where there is no local supplier, where the supplier is a state-owned utility, where the expenditure is on municipal rates and taxes or part of payroll.
Provisional Verification	Verifications during the transitional phase based on ownership, control, employment equity, skills development and corporate social investment elements of the scorecard expressed as a % ratio out of a total of 65.
Public Private Partnership (PPPs)	Widely used to implement national and provincial government's infrastructure and service delivery commitments. Regulated by the relevant Treasury (currently, the National Treasury) in terms of Treasury Regulation 16 to the Public Finance Management Act PFMA).
Qualifying transaction	Means a sale of business and/or assets from a measured enterprise to and associated enterprise. A qualifying transaction shall not be included under the enterprise development element of the generic scorecard. In addition, in order for such a transaction to be regarded as a qualifying transaction, it must comply with the following requirements: the qualifying transaction must ultimately result in the creation of

	<p>sustainable businesses and/or business opportunities for black people and in the transfer of specialized skills and/or productive capacity to black people; and the associated enterprise arising from the qualifying transaction must be a fully fledged enterprise in its own right and, as such, should at a minimum: have no unreasonable limitations imposed upon it in relation to the identity of its clients and/or customers; and have clients/customers and suppliers other than the enterprise with which the qualifying transaction was undertaken; and have no operational outsourcing arrangements with the initiating enterprise, which were not concluded at arms-length on a fair and reasonable basis.</p>				
Realization Points	The sum of the Ownership Fulfillment point and the Net Equity Interest points as referred to in the ownership scorecard.				
Restricted Specialist Services	Services imposed or where there are no alternative and comparable services or service providers available locally in this sector.				
Services	The provision of labour and/or work or professional services, including advisory services not necessarily remunerated on a unit of time basis, i.e. transaction basis as a commission, retainer or other instrument of compensation of any kind carried out by hand, or with the assistance of equipment and plant and including the input, as necessary, of knowledge-based expertise.				
SETA	Means a Sector Education and Training Authority established in terms of section 9(1) of the Skills Development Act 97 of 1998.				
Size Variation	Size	Average annual turnover		Number of employees	
		Contracting	BEPs	Contracting	BEPs
	Micro	< R1m	< R300 000	5	2
	Small	R1,1m - 12m	R300 001- R3m	6-60	3-9
	Medium	R12,1m – R60m	R3,1m – 36m	61-300	10-100
	Large "A"	R60,1m – 500m	R36,1m - 60m	> 300	> 100
	Large "B"	R500,1m – 1000m	R60,1m - 120m		
	Large "C"	R1000,1m – 2000m	R120,1 m - 200m		
	Large "D"	>2000m	>200m		
Size Variation	The turnover figures indicated above will be reviewed on an annual basis and escalated at the CPI inflation rate with base date of 1 January 2005.				
Skills Development (training)	The transfer or gaining of technical knowledge, related skills, values and attitudes in order to develop proficiency and to develop a person's natural aptitudes and other abilities to improve his/her capabilities as a worker. Training, which generally takes place outside formal educational institutions, is more often than not directed towards the needs of a specific employer or group of employers.				
SMME	Small, medium and micro enterprises. See "Size Variation".				
SOE	State-owned enterprise, an enterprise often a corporation owned by				

	government.
Superannuation scheme	A "provident fund", a "pension fund" and a "retirement annuity fund" as defined in Schedule 2 of the Tax Act 58 of 1962.
Supplier	A statutorily registered enterprise or individual who has the capacity to deliver goods and/or services required in the time frames required.
Target	The Targets attributed to the various criteria in the scorecard.
Transformational infrastructure	Such infrastructure projects in transport; telecommunications; water, waste water and solid waste; energy; social infrastructure such as access to parks, health, education, and correctional services facilities and municipal infrastructure and services.
Transitional Phase	The period between the effective date, January 2006 and the end of the first reporting period (31 December 2006).
Triple bottom line	A business concept that refers to corporate attainment of balanced and integrated economic, social and environmental performance.
Voting rights	The votes attaching to an instrument owned by a black Participant or held on behalf of a black Participant that may be exercised at a general meeting of the shareholders of a company having share capital or any similar rights in any other form of Enterprise, measured in accordance with the Flow-Through Principle or the Control Principle, provided that: (a) to the extent that the provisions of paragraphs 9 – 13 (as per Code of Good Practice issued by the DTI) provide further definition as to the nature of Voting Rights in an Enterprise other than a company having share capital, those provisions should be read in conjunction with this definition in relation to such Enterprises; and (b) Voting Rights exercised on behalf of a Participant by another natural person who acts in a fiduciary capacity or in terms of a specific mandate or proxy shall be deemed to be exercised by that Participant.
Weighting	Means the weighting attributed to various Elements in the Scorecard

Signature: _____
Operation: **National Department of Public Works**
Name: _____

Signature: _____
Operation: **African Builders Association**
Name: _____

Signature: _____
Operation: **The Association of South African Quantity Surveyors**
Name: _____

Signature: _____
Operation: **Electrical Contractors Association South Africa**
Name: _____

Signature: _____
Operation: **Master Builders of South Africa**
Name: _____

Signature: _____
Operation: **National Association of Black Contractors and Allied Trades**
Name: _____

Signature: _____
Operation: **National Federation for the Building Industry**
Name: _____

Signature: _____
Operation: **The South African Association of Consulting Engineers**
Name: _____

Signature: _____
Operation: **South African Black Technical and Allied Careers Organisation**
Name: _____

Signature: _____
Operation: **South African Federation for Civil Engineering Contractors**
Name: _____

Signature: _____
Operation: **South African Institute of Architects**
Name: _____

Signature: _____
Operation: **Southern African Institute of Steel Construction**
Name: _____

Signature: _____
Operation: **South African Women in Construction**
Name: _____

Signature: _____
Operation: **Women for Housing**
Name: _____

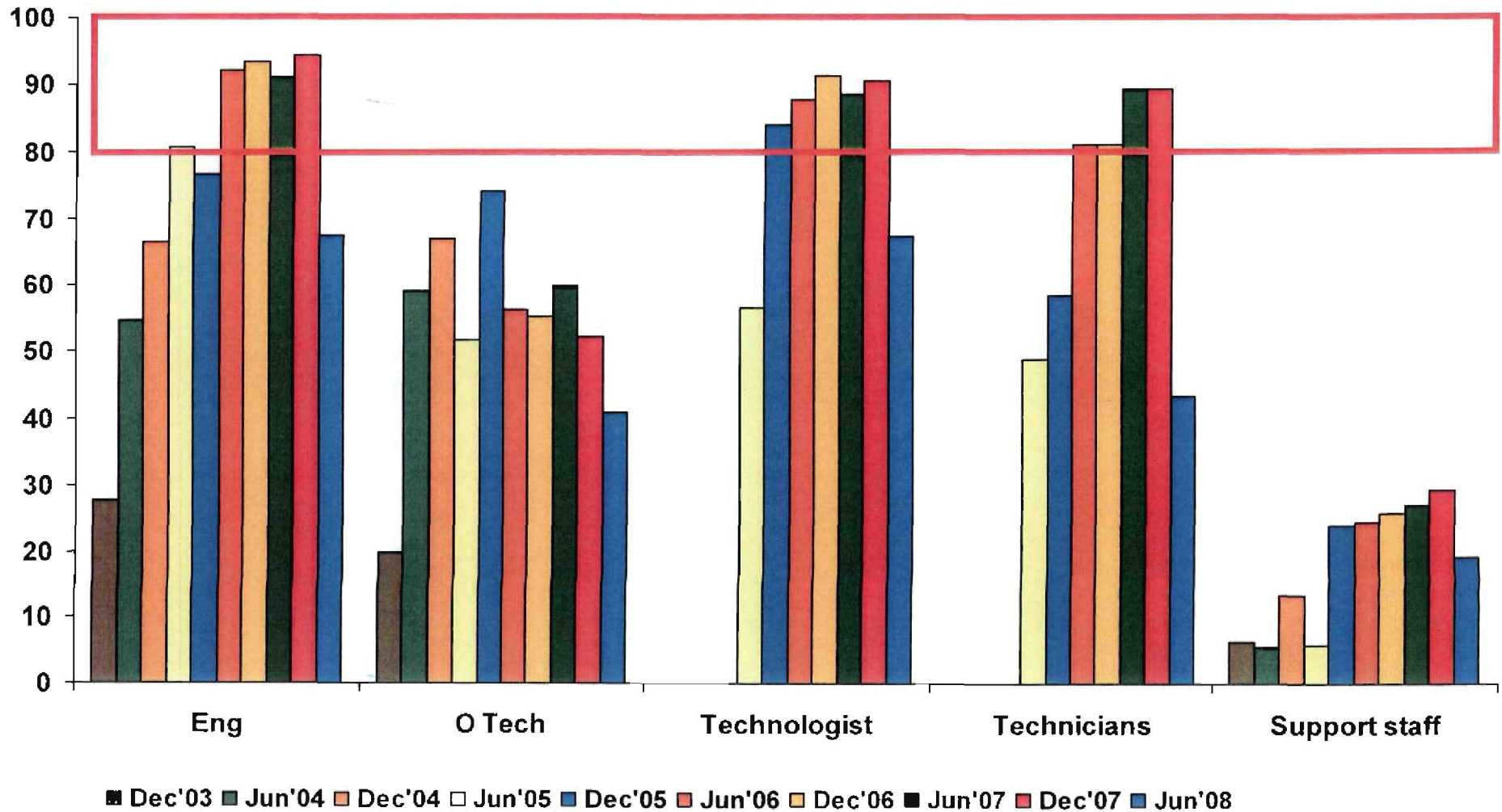
Signature: _____
Operation: **National Union of Mineworkers**
Name: _____

Signature: _____
Operation: **Building Construction & Allied Workers Union**
Name: _____

Appendix 5

(Firms wanting to increase staff)

% of Firms wanting to increase staff



New June 2005 survey

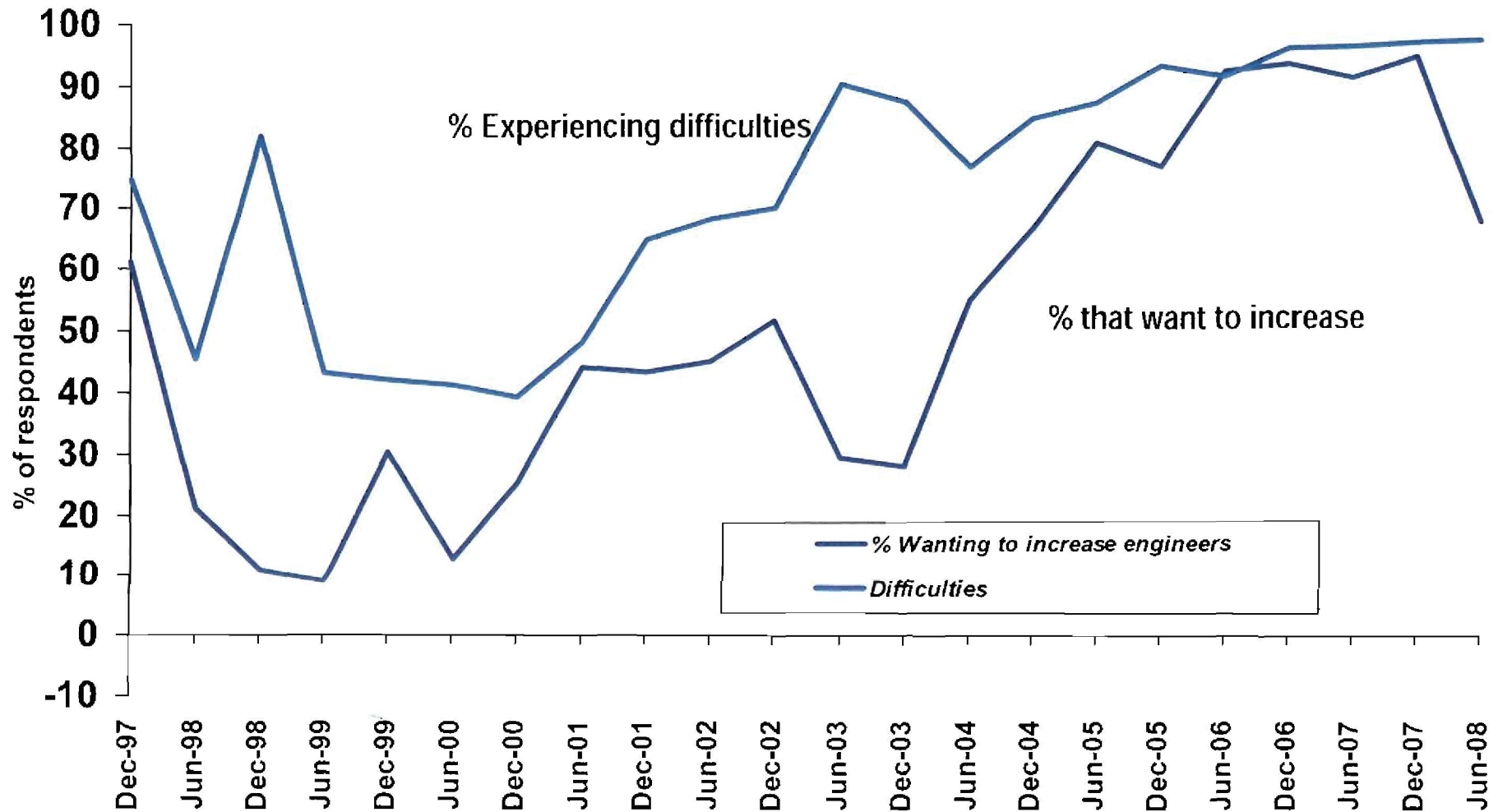
Appendix 6

(Report Engineering Shortage now critical)

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Engineering shortage now critical



Appendix 7

(Recruitment problems)

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Recruitment problems

