DOES THE GOVERNMENT HAVE A POSITIVE OR A NEGATIVE INFLUENCE IN THE SOUTH-AFRICAN CONSTRUCTION INDUSTRY?

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DOES THE GOVERNMENT HAVE A POSITIVE OR NEGATIVE INFLUENCE IN THE SOUTH-AFRICAN CONSTRUCTION INDUSTRY?

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Declaration by student

I, the undersigned, hereby confirm that the attached treatise is my own work and that any sources are adequately acknowledged in the text and listed in the bibliography.

____________________________________

Signature of acceptance and confirmation by student
Abstract

Title of treatise Does the government have a positive or a negative influence in the South-African construction industry?

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The development of the construction industry in South-Africa is to a large extent influenced by the South African government. The South African government is one of the biggest role players in this ever growing industry.

The objective of this treatise is to identify whether the government has a positive or a negative influence in the South African construction industry. Issues on Public Private Partnerships, growth by job creation and economic welfare, communication systems within the government and the status of performance and development within the construction industry, are investigated.
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Chapter 1: Introduction:

1.1 Broad overview of the problem:
The development of the construction industry in South-Africa is to a large extent influenced by the South African government. The South African government is one of the biggest (if not the biggest) role players in this ever growing industry. But is this important role the government plays, of a positive or a negative nature?

The most pressing problem facing our country nowadays is the absence of sustained economic growth and job creation, which are essential to reduce poverty and improve living conditions for all South-Africans. The construction and building sector is an important avenue for employment creation because of its employment generating capability and because government expenditure has a large influence on its expansion or contraction. (Altman 2003:4)

Housing schemes implemented by the government has created jobs and a place called ‘home’ for many.

The announcement of a large government infrastructure spending programme in 2005, such as the construction of the Gautrain Rapid Rail Link and provision of infrastructure for the 2010 Fifa Soccer World Cup, have highlighted the skills shortages (Didiza 2007:1) and surely the answer to the main problem stated below.

Public and private partnerships in South Africa can deliver better value for money for government than traditional procurement. According to Chege (2001:1) the private sector is playing an increasingly crucial role in the financing and provision of services that was traditionally the domain of the public sector. Are these public and private partnerships a positive or negative influence to the construction industry?
One will also have to investigate the communication networks between the government and the related bodies in the construction industry and how efficiently these networks function. What happens with the funding of certain projects from the moment the money is allocated to the different departments, until the first foundations are excavated? And who ensures that these funds are utilized for the intended purpose? Should the government rather configure with the Department of Public Works if a new hospital, for example, needs to be constructed or is it more efficient to configure with the Department of Health right from the beginning? And how do these two departments communicate with each other to ensure that the work that needs to be done gets done on time and within the allocated budget?

When one have a closer look at the performance and the development of the construction industry, the following question will come to mind: ‘Is the government doing everything in their power to ensure that there is continuous development in the industry or is this important part of the cycle stagnant?’

The outcome of this paper will clarify or completely answer the above mentioned allegations and/or questions.
This research will finally reflect whether the South African government has a positive or negative input in the construction sector and where room for improvement (if any) might exist.

1.2 Statement of the main problem:
**Does the government have a positive or a negative influence in the South-African construction industry?**

1.3 **Statement of the sub problems:**

1.3.1 Are private and public partnerships essential to the construction industry?
1.3.2 Is there positive growth, through the government, in the construction industry by creating jobs and economic welfare?
1.3.3 Are there effective communication between the government and the different bodies in the construction industry, regarding the funding and getting the work done?
1.3.4 Does the government improve the performance and development of the construction industry?

1.4 **Statement of the hypothesis:**

1.4.1 Yes, Public and Private Partnerships can deliver better value for money for government, than traditional procurement. Maybe this is the answer to future financial problems.
1.4.2 Yes, the growth is positive. Thousands of jobs were created with the upgrading of South Africa’s infrastructure and the housing schemes initiated by the government.
1.4.3 No, the communication is not effective. There is no effective control over what is done with funding and whether it is used for the intended purpose. Productivity decreases when effective communication doesn’t take place and this can cause projects to fail.
1.4.4 Yes, a certain amount of development takes place through
the CIDB and other originations and the role they play in the industry.

1.5. **Delimitations:**

The research captured in this paper will only include the aspects mentioned in the above stated sub problems. It will not include an investigation into each governmental department, but rather a broad overview of the National Government of South Africa as a whole. The answer to the main problem of this research will not reflect in all of the nine provinces. The research will mainly be focused in Gauteng.

1.6. **Definition of terms:**

- PPP = Public Private Partnerships
- BEE = Black Economic Empowerment
- CETA = Construction Education and Training Authority
- BEP = Built Environment Professions
- GFCF = Gross Fixed Capital Formation
- CIDB = Construction Industry Development Board
- NQF = National Qualifications Framework
- PBA = Project Budget Administration
- DPW = Department of Public Works
- SAPS = South African Police Service
- NDPW = National Department of Public Works
- CSIR = Council for Scientific and Industrial Research
- SACEM = South African Construction Excellence Model
- CCC = Construction Contact Centre
1.7. **Importance of the study:**

The aim of this study is merely to provide the reader with an answer to the main problem stated, namely, whether the government has a positive or negative influence in the South African construction industry.

1.8. **Research methodology:**

The research captured in this treatise will consist of one or two interviews with certain role players in the South African government, like Louise van den Heever of the Department of Public Works and others. The websites of the national government and other bodies or organizations involved in the industry, will be closely investigated to gather answers for the respective sub problems. Academic articles and journals, on the topic, will also be researched to find the desired conclusion.

1.9. **Resources to be used:**

- Website of the National Government
- Website of the Department of Public Works
- Website of the Construction Industry Development Board (CIDB)
- Articles and guides to Public and Private Partnerships
- Interviews with Louise van den Heever (DPW)

**Chapter 2: Are Private and Public Partnerships essential to the construction industry?**
2.1 Introduction:

Budgetary constraints in several countries have led governments to look for alternative methods of financing the provision of infrastructure. Public Private Partnerships (PPP) have received extensive attention in several countries in recent years. These PPP initiatives have enabled the public sector to make use of private sector finance and expertise.

(Chege 2001:1)

Over the past seven years, South Africa more and more increased the number of PPP transactions covering a wide range of sectors, including transport, office accommodation, healthcare, eco-tourism, social development and correctional services. The increased number of projects shows that South Africa’s experience related to PPPs is growing vastly. At the end of the day, the objective of good PPP projects is to achieve win-win outcomes. Although PPPs are one of the ways for procuring capital projects, the process followed is characterised by diligent planning and transparent bidding, these features can be encouraged for all procurement methods. The pressing service delivery challenges across all spheres of government suggest that PPPs have the potential to play an even bigger role in South Africa.

(Manuel 2007:1)

This chapter will answer whether Public and Private Partnerships are essential to the construction industry or not.

2.2 What are PPP’s?
2.2.1 Traditional Procurement vs. PPPs

PPP’s or Public Private Partnerships are long-term contracts between the private sector and the public sector. The main objective of PPP’s across the board is to ensure the delivery of well maintained, cost-effective public infrastructure or services, by leveraging private sector expertise and transferring risk to the private sector. (Manuel 2007:4)

In traditional procurement of public services or infrastructure, government pays for capital and operating costs and carries certain risks. While the skill and experience of a private company may be procured for the design and construction of infrastructure, once the asset is delivered, the private company is paid and then leaves. The public sector is then responsible for staffing, maintenance, and operation. (Manuel 2007:4)

In PPP procurement on the other hand, the public sector buys a full set of services, including infrastructure and other services, from the private sector. It pays for these over the term of the PPP agreement, based on successful delivery. The private sector typically puts its own capital at risk, funding its investment in the project with debt and shareholder equity. Because of the financial risk the private sector takes, it is motivated to provide a high level of service, as good returns on equity will depend on the quality of services it delivers. (Manuel 2007:4)

2.2.2 PPP as defined in South African law:

A contract between a government institution and private party, where:

- The private party performs an institutional function and/or uses state property in terms of output specifications
Substantial project risk (financial, technical, operational) is transferred to the private party

The private party benefits through: unitary payments from government budgets and/or user fees. (Manuel 2007:5)

2.2.3 Characteristics of PPPs:

- A PPP is a clearly defined project. Government clearly defines its objectives.
- The contractual relationship is quite a length of time and can range from 5 to 30 years.
- The private party plays a key role at each stage of the project: funding, development, design, completion and implementation.
- Payment arrangements in PPPs are based on outputs.
- Direct user charges, like road tolls or water fees, may also contribute to a project’s revenue.
- Risks are allocated to the party most able to carry them.

Fixed and operational assets are adequately maintained over the project's lifetime. (Manuel 2007:6)

2.2.4 A PPP is not:

- a simple outsourcing of functions – it is a long term contract involving substantial risk transfer
- a donation by a private party for a public good
- the privatisation of state assets and / or liabilities

(Manuel 2007:7)

Treasury Regulations define two types of PPPs:

1. where a government function is performed by a private party
2. where the private party obtain the use of property owned by government, for its own commercial purposes.

(Manuel 2007:8)

2.2.5 Financing PPPs:

Treasury Regulations doesn’t prescribe a certain financing structure of a PPP. This will vary widely from project to project and sector to sector. PPPs usually involve the raising of both debt and equity, by the private party, to finance the project. In most PPPs, a devoted business entity is set up by the private party. This is better known as a special purpose vehicle (SPV), whose only purpose is to deliver the project.

(Manuel 2007:9)

Typical SPV structure for PPPs:

**Figure 1:**

![Diagram of SPV structure for PPPs](image)

(Manuel 2007:9)

2.2.6 Reasons for choosing a PPP:
• **PPPs influence private party capital to fund infrastructure:**
  Usually the private party will use its own money to build infrastructure on behalf of government. Because the private party usually secures a loan, this is a motivation to complete the infrastructure on time and within budget.

• **PPPs control private sector skills:**
  The government accesses a series of skills offered by the private party, when handing over certain responsibilities for a project. These include all skills required in the development or in the upgrading of infrastructure, project management skills, contract management skills, service skills etc. Because of the drastic skills shortage in South Africa, this is a rather important criterion for choosing a PPP. Government has to mirror honestly on its own track record of project delivery.

• **PPPs can be good for planning of projects:**
  The PPP regulations require managers to go through a careful planning process regarding the feasibility study of the project. Thus PPPs are a good way for government to plan their projects, using well developed business plans.

• **Risks are allocated to the party that can manage them the best:**
  For example, if the private party has the correct skills to manage a project over the long term and government doesn’t, it makes perfect sense for the private party to take on and manage the risks associated with project delivery.

• **The private sector takes financial risk over the project’s lifetime:**
In contrast with traditional procurement the pricing structures in a PPP of a private party may seem more expensive. A reason for this is that in calculating and designing its pricing, the private party is including the cost of the risks that it will be managing for the whole duration of the project.

- **PPPs deliver budgetary certainty:**
  When the PPP agreement is signed, the future cost of a PPP project becomes clear: government will receive specific outputs at specific costs and will budget according to that. In contrast to traditional procurement, the costs of completing the project and maintaining the assets in the future are not certain, and are the governments’ responsibility.

- **The public sector will only pay when the services are delivered:**
  In a PPP, the government will pay the private party when the latter starts to deliver the services. The method of this payment is carefully linked to the quality of the services that are being provided. If the services aren’t being delivered to government’s approval according to the PPP agreement, the private party may be responsible to pay penalties. So the private party is obliged to deliver services that are of quality and on time. This will in turn, benefit the end-user.

- **PPPs force the public sector to focus on outputs and benefits from the start:**
  When government is determining what it needs to deliver and is considering a PPP as a possible vehicle, it has to state the outputs of a service, and should not concentrate so much on how the service is going to be delivered. The successful private party bidder is in charge of designing the details of the project.

- **The quality of service has to be maintained for the duration of the PPP:**
The private party has to maintain the same standard of the delivery of their service for the duration of the contract. This can contrast strongly with traditional procurement, when the condition of an asset declines as the asset gets older and so the level of service decline over time.

- **Specialist skills are developed and transferred to the public sector:**
  In a competitive environment, the private sector has to develop skills that the project and government will benefit from. The PPP contract will specifically require skills to be transferred to the public sector.

- **PPPs encourage the injection of private sector capital:**
  The use of borrowed capital from the private sector for a project means that the lenders of the money will make sure that a project is viable and stays on track. This will include certain strict monitoring and control mechanisms throughout the project. In addition, returns on debt and equity are only secured if a project is successfully completed and operating properly. This provides a motivation to the private party to implement and manage the project well.

  (Manual 2007:10-12)

### 2.2.7 Three tests for a PPP in South Africa:

All South African PPPs directed by Treasury Regulations are subjected to three strict tests, whatever the PPP type, structure, payment mechanism or sources of funding might be.

These three tests are:
- Is extensive technical, operational and financial risk transferred to the private party?
- Can government afford the envisaged fee?
- Is it a value-for-money solution?
Before deciding whether to use a PPP, government needs to carefully assess issues of risk, affordability and value for money.

(Manual 2007:13)

2.2.8 What types of projects are suitable for PPP procurement?

The characteristics of a project itself will indicate whether PPP procurement is suitable or not. Generally, the project should involve the development of a very large infrastructure asset with important service elements and there should be sufficient scope to allocate clearly identifiable risks to the private party.

(Manual 2007:13)

2.2.9 PPPs and BEE (Black Economic Empowerment):

BEE is a national policy objective and PPPs are seen as a good way for developing and supporting it.

PPPs offer good opportunities for strong and sustainable BEE. The entire PPP process, from the appointment of the transaction advisor to the final procurement of the private party, ensures that BEE targets are consistently set and met. BEE policy within the BEE has been devised to achieve a broad-based and sustainable BEE outcome in every PPP project.

In each PPP project there is a BEE scorecard with targets for the private party in relation to:

- Equity
- Management and employment
- Subcontracting
- Local socio-economic impact
The commitment to BEE through PPP procurement is so well-built that National Treasury has worked with the Development Bank of Southern Africa (DBSA) to create a PPP BEE equity facility to fund BEE equity in PPP deals. Not only does this financial vehicle fund equity at favoured rates it also provides financial and legal technical assistance to BEE partners. This allows BEE equity holders to arrange their participation in a PPP constructively.

(Manual 2007:15)

2.2.10 The PPP process:

PPPs are intricate contractual and operational arrangements by nature. As they involve an amount of players from different sectors, representing a range of interests, the partnership needs to be formalised and processes need to be followed in an orderly and translucent way.

The PPP unit of National Treasury has designed a basic PPP project cycle to ensure that PPPs are carried out thoroughly.

This PPP project cycle can be illustrated as follows:

```
Inception
  \downarrow
Feasibility Study
  \downarrow
Procurement
  \downarrow
Implementation
```

Where as:
- **Inception** – Government registers the project with National Treasury’s PPP Unit.

- **Feasibility Study** – Government appoints private sector advisors to do feasibility study on the most suitable mechanism for procuring the project.

- **Procurement** – If the feasibility study shows that a PPP is a viable option, government invites the market to submit bids for the infrastructure and/or service provision project.

- **Implementation** – Once a suitable bidder has been chosen and a PPP agreement is signed, the project is implemented.

  (Manual 2007:19)

### 2.2.11 Some South African PPPs:

Successfully implemented PPPs in South Africa are featured below and are projects that are in operation:

- **Inkosi Albert Luthuli Hospital**
  The private party is responsible for the provision and regular upgrading of first class medical equipment, facility management and IT systems.

- **Free State social grants**
  This project allows pension and other social grants to be made available to the rural poor using excellent wireless technologies.

- **IT for the Department of Labour**
  This PPP supplies complete IT services and state-of-the-art equipment to the Department of Labour.

- **The DTI (Department of Trade and Industry) Campus**
  This project was the first PPP head office project, it provides new head office accommodation for the Department of Trade and Industry and all its entities.
The Gautrain Rapid Rail Link is one of the recently closed deals. At financial close this project had a value of R25 billion, which makes it the largest infrastructure project in Africa delivered through a PPP. It has transferred significant construction, operational and financial risk to the private sector. Gautrain has shown that there can be a successful mix of public and private capital to achieve a strategic public infrastructure goal.

(Manual 2007:24-25)

2.3 **Summary and Conclusion:**

The government of Southern Africa is dedicated to delivering quality infrastructure and related services in line with its commitment to ensuring a better life for all.

(Manual 2007: 7)

The main reason for using PPPs is that they can deliver better value for money for government than traditional procurement.

(Manual 2007: 10)

PPP approaches have resulted in a deviation from the traditional procurement method with regards to the financing of the project. More and more use of the PPP models results in private sector financing playing an important role in this respect.

The fact that the use of PPP models for projects with significant scope in South Africa, offers the benefits of added finance for infrastructure and efficiency gains in construction and operation, while allowing the public sector to keep long-term strategic control of infrastructure cannot be debated.

(Chege 2001: 7)
PPPs in South Africa are an important service delivery mechanism because they can assist in rapid infrastructure delivery. In the South African context, the promotion of black economic empowerment (BEE) is another important consideration for pursuing PPP procurement models. South African PPPs are structured to promote and support BEE, which is a key criterion in evaluating a private party’s bid.

(Manual 2007: 10)

2.4 **Statement of the hypothesis:**

Yes, Public and Private Partnerships can deliver better value for money for government, than traditional procurement. Maybe this is the answer to future financial problems.

2.5 **Testing of the hypothesis:**

The research regarding public and private partnerships has clearly shown that the hypothesis stated has been proven to be correct. Yes, PPPs can indeed deliver better value for money for government, than traditional procurement. The increased uses of these models are definitely the answer to financing problems of projects with a large scope.
Chapter 3: Is there positive growth, through the Government, in the Construction Industry by creating jobs and promoting training and economic welfare?

3.1 Introduction:

The most pressing problem facing South Africa today is the absence of sustained economic growth and job creation, which are essential to reduce poverty and improve living conditions. The transition to a multi-racial democracy in 1994 posed difficult political, social, and economic challenges, and South Africa's noteworthy achievements in surmounting these challenges have been widely recognized. But the events of the last few years demonstrate clearly that the challenge did not end with the transition of power to a new government. What lies ahead is the daunting task of ensuring that South Africa’s rich natural and human resources are employed for the benefit of all, promoting sustainable livelihoods, improving social conditions, and alleviating poverty.

(Lewis 2001: i)

The construction industry – comprising both the building (residential and non-residential) and civil engineering sectors – plays a vital role in the South African economy. The industry is responsible for the delivery of the infrastructure that is central to the continuing development of South Africa and, increasingly, of the region as a whole. Its activities and products affect the lives of the communities that it serves both present and future. Its role is critical to the government’s programme of providing infrastructure in underdeveloped areas. Lately, institutions such as the World Bank have reiterated their belief that infrastructure investment is a core component of poverty alleviation. It is no wonder, then, that the government of South Africa seeks to get the construction industry to play a more strategic role in social development and economic growth in the future.
A healthy, viable and dynamic professional corps is therefore vital to the ability of the construction industry to improve its performance and to create a climate in which our industry can adapt to the rapidly developing changes impelled by local transformation and international globalization.

(Van Wyk 2004: 3)

3.2 Some problems the industry are facing:

The process of conceptualization and problem solving begins at school and continues throughout the life of the contributor. For the industry to be effective, it needs to attract bright young people into its ranks. Unfortunately, the image of the construction industry conspires to undermine this effort, supported by low levels of technology and the low margins evidenced within the industry. Fee cutting by clients (up to 50 percent in certain instances) has reduced margins and resulted in salaries lagging behind comparable industries by up to 40 percent.

(Van Wyk 2004: 1)

Consequently, the industry in general, and the professions in particular are showing signs of capacity distress. Large practices are disintegrating into many smaller practices, shedding employees in the process. Financial rewards are reducing whilst liability increases, in-house research and professional development have slowed, and innovation has been replaced by replication.

(Van Wyk 2004: 1)

Teaching at tertiary institutions is going through traumatic times as the institutions struggle to transform in response to changing socio-economic trends. Low salaries and high student-to-teacher ratios place additional burdens on their teaching capacity. The current educational approach at architectural schools is still, in the main, predicated on 19th century models. Unreliable evidence from
engineers suggests that some engineering graduates cannot undertake basic calculations.

(Van Wyk 2004: 1)

The poor economic environment and deficient tertiary preparation have resulted in deteriorating standards of professional practice. In fairness, the construction industry seems determined to continue using delivery models borne out of the pre-industrial revolution, doggedly relying on guild-like craftsmanship in an age demanding innovation, productivity and technological dynamism. The South African construction industry is the fourth highest employer of workers having no formal education, after agriculture, households and mining. It also has the fourth smallest number of participants with a tertiary education, after the same industries indicated above. In this chicken-and-egg scenario, it is difficult to determine who shares the greatest responsibility for this perpetuation – the construction industry or the professions.

(Van Wyk 2004: 1)

Regulatory changes have added their own dimension to this contest, as the competing forces of targeted procurement and lowest price bidding drive down innovation. Although much of the legislation is now in place, consistent implementation throughout all levels of government remains a challenge.

(Van Wyk 2004: 2)

The professions remain dominated by males: whilst this is an international trend, it poses critical transformation challenges to our developing country. Construction-related circumstances and post apartheid realities conspire to undermine current efforts at redressing this circumstance. Critical interventions in the education system are being undertaken to redress past equalities in school attendance and facilities.

(Van Wyk 2004: 2)

Against this barrage of domestic challenges, including the scourge of
HIV/Aids, the built environment professions, and indeed the construction industry, have to face global forces that are setting new performance benchmarks in terms of corporate governance, sustainable development imperatives and technology advances. The built environment professions will not remain untouched by these challenges. Significant changes will be required with regard to education, training, skills development, knowledge enhancement and service delivery. What is indisputable, however, is the need for all the industry participants to collaborate in improving the products for which they are responsible, for the benefit of the society they serve.

(Van Wyk 2004: 2)

3.3 What can be done to ensure the long-term viability and vitality of the built environment professions in South Africa?

If the industry wishes to deliver improvements in, amongst others, quality and efficiency, it will need to radically improve the process through which it delivers its projects.

Improvements to the delivery process will require the built environment professions to review their current practice methodologies and to examine the scope of improving, through innovation, their own products and processes.

Enhanced construction industry performance will require a vibrant and dynamic professional group.

(Van Wyk 2004: 4)

Some of these Built Environment Professions (BEP) sector issues are:

3.3.1 Capacity:

All indications are that the capacity of the professional sector within the industry is declining. The Skills Sector Plan (SSP) of CETA (Construction Education and
Training Authority) indicated that the number of people employed within the architectural sector reduced by 50 percent between 1993 and 1999. Reducing financial margins and the need to improve productivity have directed practices toward increasing their use of information technology in order to significantly reduce the number of people employed in professional practices.

(Van Wyk 2004: 4)

Consequently, employment levels have almost halved within the construction sector since the eighties, with less than 12 percent of newly hired people being transferred to another project.

(Van Wyk 2004: 5)

Nonetheless, South Africa faces an enormous infrastructure development challenge that requires economic stability driven by substantially increased investment in GFCF (Gross Fixed Capital Formation). Increasing GFCF investment will require enhanced skill capacity and expertise that, according to current evidence, is a diminishing resource in South Africa.

(Van Wyk 2004: 5)

3.3.2 Skills development:

According to the CETA Report, the professional consultancies sub sector has indicated that many experienced members were retiring or nearing retiring age and that a replacement void was developing. It suggested that steps be taken to ensure that high levels of competence and experience be retained through a succession programme. Unfortunately, the limited number of construction projects and the scope thereof do not enable the retention of experienced people or allow inexperienced professionals to gain the necessary hands-on experience.

Van Wyk 2004: 6)
Similarly, the lower level of business activity has reduced the extent to which time and money can be spent on mentoring and in-house training. In-house training and mentoring as a means of knowledge transfer has been a strong tradition within built environment consultancies in South Africa: many of the current professionals still active in South Africa gained highly specialized skills through this practice.  

(Van Wyk 2004: 6)

The loss of mentoring opportunities and in-house training is impacting particularly on young graduates, who find it difficult to obtain pre-registration employment. They are increasingly being forced to become self-employed and consequently gain their experience at the expense of their clients.  

(Van Wyk 2004: 6)

Continuing professional development is currently not compulsory, with the exception of the quantity surveyors, and thus, whilst most voluntary associations offer courses, attendance is not very high. A consequence of this is that the course content is very narrowly focused and many of the issues with which consultants should be engaging – such as sustainable development – are not being adequately addressed.  

(Van Wyk 2004: 7)

In assessing the demand for future skills, the CETA report concludes that the poor growth forecasts for the near future will not demand additional skill capacity. However, it does note that there is a need emanating from a demand for higher skills, and for training for productivity increase.  

(Van Wyk 2004: 7)
3.3.3 Transformation:

The number of students from previously disadvantaged communities enrolling in built environment courses is lower than anticipated or desired. This can be ascribed, in part, to a perception that the built environment professions do not offer the financial rewards that some of the other professions, such as accountancy and information technology, do. Consideration of a career in the construction industry is also discouraged by a lack of black role models in the construction industry, particularly in leadership positions throughout the construction industry.

(Van Wyk 2004: 11, 12)

Admission requirements to tertiary institutions are a further impediment to black enrolment. The built environment professions, particularly engineering, require mathematics and science as core course subjects: however, mathematics and science proficiency among school-leavers is very low, thereby further reducing the available undergraduate pool.

In general, built environment courses are lengthy and expensive and the salaries for graduates far lower than the professionals involved in commerce, information technology and law. Salary adjustments are also far slower and far less, as they are experienced-linked. Even so, a professional with 10 years’ experience is most likely to be earning far less than his financial or IT counterpart.

Of those individuals from previously disadvantaged communities entering the profession, women constitute a greater proportion. This does pose some interesting medium to long-term challenges to some of the professions, for example, architecture. In many instances, women who elect to begin a family will open and run relatively small architectural practices from home, accepting commissions that will allow them to attend to their family commitments. The consequences of this, should it become the predominant practice type, will dramatically reduce the capacity of the architectural profession to undertake
large commissions. Transformation initiatives within the industry – such as government’s targeted procurement – are also exerting an impact on practices. Work to SMMEs, for example, has increased, resulting in huge management challenges both for clients and service providers. Currently practitioners are generally ill equipped to deal with these challenges and receive no training to assist them or additional remuneration for the extra work.

(Van Wyk 2004: 11, 12)

3.3.4 Education and Training outcomes:

Education and training is by definition the most fertile ground for instituting the culture change required for construction industry development and enhancement. A review of the outcomes of tertiary institutions is required and a realignment of outcomes to explicitly place education in the context of a changing construction industry. If the construction industry of South Africa seeks to remain globally competitive, it will need to be responsive to this vision statement of the Construction Research and Innovation Strategy Panel (CRISP): “a highly trained, multi-skilled workforce of professional designers, planners and managers, technicians and craftsmen using specialist skills”.

(Van Wyk 2004: 16, 17)

Tertiary institutions must assume some of the responsibility for the industry’s woes: graduates in each discipline are not encouraged to learn about related disciplines. It has been suggested that teachers at tertiary institutions are not sufficiently comfortable with their own knowledge of related disciplines and therefore rarely encourage students to pursue multi-disciplinary paths. For one, tenure used to be granted on the basis of the expert knowledge in a particular field: there is little motivation therefore, to reinvent oneself after achieving this status. In addition, departments’ budgets are based upon the number of
students in a specific discipline, thereby forcing Heads of Schools to promote study within that discipline.

(Van Wyk 2004: 16, 17)

Consequently, many graduates enter the workforce unprepared to integrate project knowledge across disciplines and, of greater concern, show no desire to understand why this would be of any importance. Often graduates are predisposed to suspect the motives of their colleagues in related disciplines – a practice that is usually further exacerbated in the workplace. International surveys indicate that generally practitioners complain that ‘the courses do not adequately qualify students for the practical aspects of the job.’

(Van Wyk 2004: 16, 17)

3.4 How is the South African government assisting in these challenges?

3.4.1 CETA – Construction Education and Training Authority:

Construction Education and Training Authority (CETA) was established in April 2000 after the promulgation of the Skills Development Act, No. 97 of 1998 which aims to develop and improve the skills of the South African workforce.

(CETA website)

CETA’s primary objective is to influence the course of training and skills development in the construction sector. Various skills development projects and learner ships are initiated with a view of developing a pool of skilled and motivated construction workforce whose skills are recognised and valued in terms of the National Qualifications Framework (NQF).

(CETA website: 2009)
In accordance with CETA’s quality driven philosophy, standards are rigorously adhered to. CETA is accredited as an Education and Training Quality Assurance (ETQA) by the South African Qualifications Authority (SAQA). This ETQA status authorizes CETA, to accredit and monitor the delivery of training by Accredited Training Providers. CETA does not offer training itself. One of the tasks of CETA is to ensure that people who have acquired skills but do not have the required qualifications, participate in the Recognition of Prior Learning (RPL) assessment process.

(CETA website: 2009)

Construction Education and Training Authority has built a solid reputation for service excellence in its mandate to accelerate skills development in the construction sector.

Drawing on a history and a strong heritage of quality and innovative leadership supported by Business and Organised Labour, CETA has since its inception fulfilled its mandate of initiating and promoting skills training in the construction sector.

In realizing their mission of promoting quality education and training in the sector and making their services accessible to all citizens, CETA has established five Regional Offices in the country to engage with relevant stakeholders to ensure that the countries need to improve and promote skills development is achieved. Their strengths allows to possess the strong financial credentials and stability to build long term partnerships with stakeholders and offer them a full range of diversified skills development projects and programme with a view of participating meaningfully in the labour market.

Their principal area of operation is initiating and promoting skills development and learner ships in South Africa.

(CETA website)
3.4.2 **Job creation in the construction industry:**

Some 450 000 people are formally employed in building and construction (excluding manufacturing and distribution) with a further three to four informal subcontracting employees per each formal worker. Formal employment will grow by 30-60% to between 600 000 and 700 000 by 2010. It is estimated that some 200 000 to 300 000 are employed in the manufacturing and distribution of building and construction materials. The growth to 2010 in this employment will be less than 10%.

When looking at the cumulative investment from 2008-2015, the total projected investment in home improvement is R196.65 billion. If the above-noted ratio of investment to job creation in the South African building industry is used, around 837 750 jobs would be created over the estimated seven year period. The nature of these jobs is not clear.

Estimates of potential job creation often seem rather over optimistic. However, the estimates quoted above are based on findings of an official report for the Construction Industry Development Board (CIDB). In spite of this, caution in accepting them at face value is recommended. Other reports indicate much lower employment expectations for major investments in other related sectors in South Africa.

The R124 billion investments in the electricity and transport networks that is expected to produce only 55 000 jobs over a five year period is to be noted (Business Report, 2006). Nevertheless, even if there is uncertainty about exact employment figures it can be certain that the planned investment in construction and refurbishment will have an important employment effect that will be much higher than other sectors.

(Kolev 2009: 5)
The size of the job-creation spin-off from South Africa's preparations for the 2010 Fifa World Cup will depend appreciably on the pace of decision-making by the local organising committee.

(Creamer 2005: 1)

The additional infrastructural spending associated with hosting football's showcase event has been projected at R10, 7-billion and it has been suggested that thousands of work opportunities will be created. However, South African Football Association CEO Danny Jordaan stresses that the prospects for job creation improves markedly if a longer construction lead-time is built in to the preparation phase.

(Creamer 2005: 1)

Jordaan, who is credited for South Africa's bid victory and who Fifa president Sepp Blatter is backing to run the local organising committee, says that discussions have already been held with the local construction industry about the prospects of using labour-intensive techniques in the preparation of infrastructure and stadiums.

(Creamer 2005: 1)

He reports that the industry is supportive of a labour-based construction plan, but that it has warned that it would require a window of at least 36-months if such methods were to be employed. However, Jordaan stresses that work opportunities are not limited to the preparation phase and that there will also be significant job creation during the second, or operational, phase.

(Creamer 2005: 1)
3.5 **Summary and Conclusion:**

For the industry to be effective, it needs to attract bright young people into its ranks.
Teaching at tertiary institutions is going through traumatic times as the institutions struggle to transform in response to changing socio-economic trends. Low salaries and high student-to-teacher ratios place additional burdens on their teaching capacity.
The poor economic environment and deficient tertiary preparation have resulted in deteriorating standards of professional practice.
The South African construction industry is the fourth highest employer of workers having no formal education, after agriculture, households and mining. (Van Wyk 2004: 1)

The professions remain dominated by males: whilst this is an international trend, it poses critical transformation challenges to our developing country. Critical interventions in the education system are being undertaken to redress past equalities in school attendance and facilities. (Van Wyk 2004: 2)

If the industry wishes to deliver improvements in, amongst others, quality and efficiency, it will need to radically improve the process through which it delivers its projects.
Improvements to the delivery process will require the built environment professions to review their current practice methodologies and to examine the scope of improving, through innovation, their own products and processes. Enhanced construction industry performance will require a vibrant and dynamic professional group. (Van Wyk 2004: 4)

Some of these Built Environment Professions (BEP) sector issues are:
• Capacity
• Skills Development
• Transformation
• Education and Training outcomes

(Van Wyk 2004: 4)

CETA’s primary objective is to influence the course of training and skills development in the construction sector. Various skills development projects and learner ships are initiated with a view of developing a pool of skilled and motivated construction workforce whose skills are recognised and valued in terms of the National Qualifications Framework (NQF).

Their principal area of operation is initiating and promoting skills development and learner ships in South Africa.

(CETA website)

Even if there is uncertainty about exact employment figures it can be certain that the planned investment in construction and refurbishment will have an important employment effect that will be much higher than other sectors.

(Kolev 2009: 5)

The additional infrastructural spending associated with hosting football's showcase event has been projected at R10, 7-billion and it has been suggested that thousands of work opportunities will be created.

(Creamer 2005: 1)

3.6 Statement of the hypothesis:

Yes, a certain amount of development and job creation takes place through the CIDB, CETA and other organizations and the role they play in the industry.
3.7 **Testing of the hypothesis:**

According to the research done, on whether there is positive growth through the government in the construction industry, the hypothesis has been proven to be partially correct.

It is proven that CETA does their part by ensuring development in the skills and training of participants in the industry.

It is also a well-known fact that all the infrastructure upgrades undergoing in South Africa is a more than positive job creation tool.

Although government is responsible for a part of the growth in these departments of the industry, more can be done by government to ensure exceptional growth and job creation, that will not only last until 2010, but will sustain long after that.
Chapter 4: Are there effective communication between the government and the different bodies in the construction industry, regarding the funding and getting the work done?

4.1 Introduction:

Effective communication, especially in a professional environment, is highly important and of the essence. When the correct communication is not in place, other structures will also fall apart and can result in projects failing.

A deeper look will be taken into communication networks between the government and the related bodies in the construction industry and how efficiently these networks function. Clarification is needed on what happens to the funding of certain projects from the moment the money is allocated to the different government departments, until the first foundations are excavated; and who ensures that these funds are utilized for the intended purpose.

In answering sub-problem 3 of this paper, an interview has been undertaken on Friday 19 June 2009, with the director (Mrs. Louise van den Heever) of the Project Budget Administration (PBA) Department within the National Department of Public Works in South Africa.

Answers given by Mrs. Van den Heever were of excellent help and will be referred to in answering this sub-problem.
4.2 How do communication networks function within the National Department of Public Works?

4.2.1 The National Department of Public Works and the Departments functioning within:

The National Department of Public Works have Regional Offices in all provinces. The offices are located in Cape Town, Port Elizabeth, Umtata, Durban, Bloemfontein, Kimberley, Mmabatho, Johannesburg, Pretoria, Nelspruit, Polokwane and a Head Office in Pretoria. This Department report directly to the Minister of Public Works.

Then there also are the Provincial Departments. They are not specifically referred to as Public Works and with some of them “Public Works” do not feature in their name. They report on provincial level and there are differences between the provincial and national departments. Hospitals, schools, clinics, roads etc. are the responsibility of the provincial departments. The National Department are responsible for construction, refurbishment, maintenance to accommodation of National Departments e.g. prisons, office accommodation for National Departments (SAPS, Defence, Correctional Services, Home Affairs, Labour etc.), courts, defence bases etc.

The Government Immovable Asset Management Act (Act 19 of 2007) was circulated and going forward this Act will dictate how and by whom certain actions will have to be done. Originating from GIAMA guidelines for the completion of User Asset Management Plans (U-AMP) and Custodian Asset Management Plans (C-AMP) have been developed. The completion of these documents will be necessary as this will be the base documents for National Treasury to allocate funding commencing from the 2010/11 financial year. For national departments the custodian is Public Works and the C-AMP will be
completed by the National Department of Public Works. The U-AMPs will be completed by all the User Departments.
As Public Works is also a user (of accommodation) they will also have to complete a U-AMP.

The completion of these documents will however not entail a lot of changes in the environment; it will just ensure standardisation and timeous submission of requests for funding to National Treasury.

Two funding sources in the environment are being referred to as Capital Works and Maintenance. Capital Works funding will be for the construction of new buildings, acquisitions (this can refer to sites for construction, accommodation), upgrading of accommodation and are on the vote of the User Departments. Maintenance is on the vote of Public Works and this funding is utilised for Planned Maintenance (repairs and renovations to accommodation, replacement of equipment) and day-to-day maintenance.

4.2.2 The purpose of the Project Budget Administration (PBA) Department:

The Project Budget Administration unit manages the budgets allocated to it. There is a PBA unit in every Regional Office and this unit has to manage the Capital Works and Planned Maintenance budgets allocated to them. Funds are allocated on a per project basis and based on the cash flow projections of the services. These cash flow projections are provided by the departmental project manager.

The PBA must monitor expenditure and report any possible over or under expenditure. Further authorization and approval of funds to process payments are done by them. If this is not done, payments cannot be made to a service provider. These authorizations are done according to funding confirmations received from the User Departments. This is done throughout the project, when
variation orders / contract instructions are required, approval must be obtained from the User Department and the funding for this is only done after confirmation has been provided by the User Department.

4.2.2 Communication networks within the Department of Public Works:

There are various communication channels followed in the Department. Normally before a project commences a needs assessment is received from the User Department, a norm document is then completed by the National Department of Public Works (DPW), the User indicate that they are satisfied and they indicate that funding will be provided for the services to commence. The service is initiated and throughout the project there are communication in the form of letters and other correspondence and meetings between DPW and the User Departments. The User Departments also have representatives on a regional level and these people are also in touch with the Regional Office personnel. Reports are also provided on a monthly basis providing feedback on progress of services or problems that might be experienced during the progress of the works.

4.2.3 When does the PBA become involved in a new project?

The PBA becomes involved in a project even before it commences and is involved throughout the duration of the project. Although a building is utilized by for example the SAPS, the Department of Public Works is the keepers of the accommodation and as such is responsible for the maintenance of the buildings. As such when a building must be disposed of or be demolished, that decision lies with the DPW and not a User Department.
4.2.4 What happens with the funding of a project between the points where the money is allocated by National Treasury and until the first foundations are excavated?

There are various processes followed during this process. It should however be noted that the total project cost are not allocated up front. Funds are allocated according to the cash flow projections of a project and taking the contract period into consideration. After the planning / procurement instruction has been issued, the planning of the project commences (this is the technical part where physical visits to the sites are made, drawings are made, the sketch plans process is undertaken and compilation of documents are done), invitation of bids take place (this is usually an open bid process), awarding of bids are made, obtaining of securities, confirmation of funding by the User departments etc. If a new site has to be acquired the site clearance period will also have to be taken into account. Depending on the value of the project it can vary from 3 – 18 months. As mentioned if a project for instance is a 24 months contract, funds will be allocated based on the anticipated award date, the value of the project and the contract period. All this information is captured on an electronic system that uses the Haylett formula to calculate cash flow projections.
National Department of Public Works: Capital Works – Allocations for building programme 2008/2009:

**Figure 2:**

![Diagram of Allocation Distribution per Region](image1)

(Memo by Minister of Public Works 2008/2009: 2)

**Figure 3:**

![Diagram of Allocation Distribution per Departments](image2)

(Memo by Minister of Public Works 2008/2009: 2)
National Department of Public Works: Works-in-progress vs. Allocation per client:

**Figure 4:**

![Bar chart showing works-in-progress vs allocation per client](image)

**SUMMARY TABLE - TOTAL PROJECTED EXPENDITURE AND ALLOCATION**

<table>
<thead>
<tr>
<th></th>
<th>Public Works (incl Prestige)</th>
<th>SA Police Service</th>
<th>Other Clients</th>
<th>Justice</th>
<th>Correctional Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Allocation</strong></td>
<td>1,031,208,000</td>
<td>580,000,000</td>
<td>390,894,754</td>
<td>232,230,145</td>
<td>761,773,206</td>
</tr>
<tr>
<td><strong>New Services</strong></td>
<td>170,896,961</td>
<td>0</td>
<td>15,458,440</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Work in progress</strong></td>
<td>860,311,039</td>
<td>580,000,000</td>
<td>375,436,314</td>
<td>232,230,145</td>
<td>761,773,206</td>
</tr>
</tbody>
</table>

(Memo by Minister of Public Works 2008/2009: 2)
4.2.6 How does communication take place between the different National Departments ensuring that the project is completed within time and budget?

When bids are invited the contract period in which a project must be completed is provided to all bidders. Before a project commences the interested parties already know what the timeframe for completion is. If a contractor is late with a project he is penalized for late completion. Funds are approved based on the accepted bid and the system used by DPW does not allow a project manager to pay more to a contractor than was initially approved. There is a process in place to request additional funds and only after it has been approved by all the relevant parties, will the project manager be able to proceed with payment. Regular site meetings are held and the User client e.g. SAPS (South African Police Service) are always invited to attend these meetings. As mentioned previously, monthly reports are also provided to the User Departments.

4.3 Summary and Conclusion:

Communication within the Government departments (especially the National Department of Public Works, which concerns this paper) takes place in various ways. The Head office of the DPW reports directly to the Minister of Public Works.

There are provincial and national departments. Hospitals, schools, clinics, roads etc. are the responsibility of the provincial departments. The National Department are responsible for construction, refurbishment, maintenance to accommodation of National Departments e.g. prisons, office accommodation for National Departments (SAPS, Defence, Correctional Services, Home Affairs, Labour etc.), courts, defence bases etc.
Two funding sources in the environment are being referred to as Capital Works and Maintenance.
The Project Budget Administration unit manages the budgets allocated to it. There is a PBA unit in every Regional Office and this unit has to manage the Capital Works and Planned Maintenance budgets allocated to them. Funds are allocated on a per project basis and based on the cash flow projections of the services.
The PBA must monitor expenditure and report any possible over or under expenditure.
The channels of communication that are followed are extensive and well established, whether they are used correctly will be the downfall or the ultimate success of the projects entertained by it.

4.4 Statement of hypothesis:
No, the communication is not effective. There is no effective control over what is done with funding and whether it is used for the intended purpose. Productivity decreases when effective communication doesn’t take place and this can cause projects to fail.

4.5 Testing of the hypothesis:
In the research undertaken on the communication between the government and the different bodies in the construction industry, the hypothesis stated has theoretically proven to be wrong. The communication networks are well established and there are various channels that are in place and used to ensure that effective communication can take place. Whether this communication is always functioning on an effective level will depend solely on the users following or ignoring these definite channels.
There is indeed control over what is done with the funding of projects and various departments are in control thereof and manage these funds.
Chapter 5: Does the government improve the performance and development of the construction industry?

5.1 Introduction:

The construction industry in South Africa is a significant player in the economy and remains an important economic sector. According to the Department of Public Works (1999), the industry contributes 35% to the total gross household fixed investment and employs roughly 230,000 employees.

The government of South Africa is almost the biggest construction client, making up between 40% and 50% of the entire domestic construction expenditure. The construction industry faces some challenges in its attempt to deliver infrastructure projects effectively.

The Department of Public Works (1999) reports, amid other industry challenges, a decline in employment the last 20 years, a decline in gross domestic fixed investment (GDFI), slow delivery of public sector projects due to poor capacity in the public sector institutions and the contractors, low productivity and poor quality workmanship, and low profit margins for contractors.

Big South African contractors in particular are increasingly expanding into offshore markets to grow revenues and to survive the current economic recession affecting the South African construction industry.

This means that South African contractors need to be more competitive to match the level of performance of their counterparts working in international markets.

To develop the current industry situation a government department, The National Department of Public Works (NDPW), was tasked to develop a corrective strategy. The launch of the framework document, in 1999 (DPW, 1999) was one of the first crucial involvements aimed at addressing the situation, and set the tone for government’s intention.
Subsequently a Construction Industry Development Board (CIDB) Act was agreed in 2000 thus establishing a statutory body aimed at driving an integrated Construction Industry Development strategy. The CIDB has established the construction industry development strategy, performance targets and key performance indicators. The promotion of best practice standards constitutes a critical component of the industry development strategy.

In strong support of the industry development strategy, the Council for Scientific and Industrial Research’s (CSIR) Building and Construction Technology Division is developing a model for assessing an overall performance of contractors with a view to promoting best practice standards.

(Sihle 2002:2)

5.2 **Background:**

5.2.1 **Background of the Structure of South African Contractors:**

South Africa is privileged to have a well established contracting sector as part of its construction industry. Despite of this fact, there are many serious challenges still facing contractors. A simplified structure of South African contractors can be illustrated as shown in the table below.
Table 1: The structure of South African Contractors

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>ECONOMIC SECTOR</th>
<th>ANNUAL TURNOVER</th>
<th>MANAGEMENT SKILLS LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMALL</td>
<td>FORMAL</td>
<td>LESS THAN R10M</td>
<td>VERY POOR AND FAIR</td>
</tr>
<tr>
<td></td>
<td>INFORMAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td>FORMAL</td>
<td>R10M – R50M</td>
<td>POOR, FAIR, GOOD AND VERY GOOD</td>
</tr>
<tr>
<td></td>
<td>INFORMAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LARGE</td>
<td>FORMAL</td>
<td>ABOVE R50M</td>
<td>FAIR, GOOD AND VERY GOOD</td>
</tr>
</tbody>
</table>

(Sihle 2002:2)

5.3 The South African Construction Excellence Model (SACEM)

The South African Construction Excellence Model (SACEM) is promoted as a tool most suitable to facilitate the culture of continuous improvement for contractors.

5.3.1 What is the South African Construction Excellence Model?

The South African Construction Excellence Model (SACEM) is a contractor performance assessment tool. But more than just a tool, it is a comprehensive, systematic model intended to promote the concept of ‘total quality management’ at both the corporate level as well as the construction site level. SACEM’s approach to excellence is through systematic, continuous improvement of eleven key performances criteria. The model is diagnostic in its approach and does not provide a specific solution, only an indicative approach towards a solution. SACEM is strongly based on the principles of the South African Excellence Foundation’s model - the South African Excellence Model (SAEM).

(Sihle 2002:4)
5.3.2 How SACEM works and its relationship to the construction industry development strategy?

Among the key components of the CIDB’s construction industry development (CID) strategy is the Star Grading System which is aimed at promoting best practice in selected high-risk projects. The system makes use of an assessment process to evaluate current performance of contractors and allocate one or more stars to indicate the level of overall business performance of contractors. In terms of the grading system contractors scoring five stars can be regarded as “excellent” contractors that incorporate best practices. Such contractors can be regarded as having the lowest possible risk and capable of managing complex public and private projects relatively more effective than contractors with fewer stars.

In supporting the construction industry development strategy it is important that SACEM be integrated into the CID strategy. SACEM is intended for use, among other things, as a pre-qualification system for managing risk associated with contractors. SACEM, therefore, could be linked to the CIDB’s Star Grading System by converting SACEM scores into CIDB’s star grades. This critical link between SACEM and the CIDB processes is illustrated in figure 4. For this link to be established it is critical that a strong partnership between the CSIR and the CIDB be formed.

(Sihle 2002:6, 7)
A second key component of the CID strategy is to directly assist contractors to identify their areas of improvement and thus continuously improve their operations. Performance assessment could be approached in two ways; by contractors themselves as part of an internal exercise, or by an independent agent where external recognition is required.

Many other applications of SACEM abound. SACEM could be used by financial institutions, such as commercial banks, to assess the level of contractors overall performance and to determine the level of financial risk associated contractors.
5.4 **The National Department of Public Works.**

5.4.1 **The role played by the Department of Public Works:**

The Department of Public Works (DPW) aims to promote the government’s objectives of economic development, good governance and rising living standards and prosperity by providing and managing the accommodation, infrastructure needs of national departments, by leading the national Expanded Public Works Programme and transformation of the construction and property industries. In pursuance of this objective the Department will endeavour to:

- Efficiently manage the asset life cycle of immovable assets under the Department’s custodianship;
- Provide expert advice to all three spheres of Government and parastatals on immovable assets;
- Contribute to the national goals of job creation and poverty alleviation through programme management, leading and directing of public works programmes nationally, of which the Expanded Public Works Programme (EPWP) forms an integral part; and
- Provides strategic leadership to the Construction and Property Industries.

For many years, the South African construction sector was plagued by a tarnished and unappealing image - ultimately confirmed by the exodus of skilled built environment professionals and the inability to promote the construction and property sector as a first choice career destination to the youth. Currently the construction industry continues to experience a chronic shortage of skills and continue to attract insufficient numbers of new entrants into the sector. Continuous development within the industry is cardinal to promote growth.

(Public Works website: 2009)
5.4.2 Construction Industry Development Programme:

The over-arching strategic context for the programme flows from the White Paper on “Creating an enabling environment for the Reconstruction and Development of the South African Construction Industry”. The White Paper identifies a number of key programme areas for the implementation of policy drivers.

A number of key issues have come to the fore that has shaped the form of the programmatic responses to the policy. These issues have been translated into policy drivers and strategic responses have been developed for each area. The key issues are:

- Although there have been policies and strategies and programmes developed for the transformation of the construction industry, the transformation process has been very slow with few tangible outcomes
- Government’s interventions relating to the development and growth of the emerging contractors (including women and youth) has not yielded substantial success outcomes
- Current skills development strategies and programmes have contributed to a slight improvement and increase in the skills base of the industry
- South African construction industry’s contribution to NEPAD and the development and growth of the regional construction industry could be hampered by the different developmental stages of other SADC states and their skills capacity
- The CIPU is mandated to develop policies, strategies and programmes that will address issues of transformation, growth, development, competitiveness and well-being of the South African construction industry while contributing to the development of the regional and African construction industries.
- The CIDP is structured to strategically respond to policy issues and drivers that emanate from the above strategic context.

(Public Works website 2009)
5.4.2 National Construction week:

The concept of National Construction Development Week was first hatched in 2001 and adopted by the Top Management Committee of the time. The idea was motivated mainly by the role the Department had played in positioning the construction industry as well as copied from similar ventures undertaken by other Departments including Water Week, Arbor Week, Science Week, Environmental Week etc.

It is in this spirit that the Department initiated the National Construction Week in 2006, a nation-wide awareness campaign to promote the image and profile of the construction industry as a transforming sector capable of meeting and realizing transformation goals of the state as detailed in the RDP literature, the White Paper on the transformation of the industry as well as the scorecard indicators contained in the Construction Industry Transformation Charter. It also offers young learners, women, blacks and emerging enterprises the opportunity to experience a wide range of exciting opportunities available in today’s built environment and its construction sector.

Inadvertently, the National Construction Week will be among other barometers to Gauge progress of the transformation route meanwhile showcasing the role of the public sector and private sector partners in collaborating to achieve growth targets.

(Public Works website 2009)
5.5 **The Construction Industry Development Board (CIDB):**

5.5.1 **The role played by the CIDB:**

In 1997 government published the Green Paper on “Creating and Enabling Environment for Reconstruction, Growth and Development in the Construction Industry” paving the way for establishment of the CIDB.

The Construction Industry Development Board (CIDB) which is a Schedule 3A public entity, was established by Act of Parliament (Act 38 of 2000) to promote a regulatory and developmental framework that builds the construction delivery capability for South Africa’s social and economic growth and promote a proudly South African construction industry that delivers to globally competitive standards.

The CIDB’s focus is on sustainable growth, capacity development and empowerment, to improve industry performance and best practice. They also focus on an industry that will be transformed and underpinned by consistent and ethical procurement practices. This development will finally enhance value to clients and society.

(CIDB website 2009)
5.6  **The Construction Contact Centre (CCC):**

5.6.1  **What is the purpose of the CCC?**

The aim of the Construction Contact Centre (CCC) is to provide clients, stakeholders, partners and Construction Industry Development Board (CIDB) registered contractors with a one stop construction support service. This concept is an initiative by CIDB and the National and Provincial Departments of Public Works (DPW's) in support of contractors and construction industry development.

The CCC supports contractor development by growing contracting capacity, promoting equity, encouraging continuity and sustainable work opportunities and improving industry standards and performance in terms of quality, employment conditions, skills, safety, health, etc.

The services to be rendered by the CCC include:

- Contractor Registration Advice and Help Desk
- Support services
- Enterprise and Business Development
- Contractor Development

The CIDB and all provincial CCC's will be interlinked. This will provide the user of the centres with information regarding the construction industry in South Africa.

The CCC concept is premised on a partnered approach. Partners and stakeholders will contribute in different ways to enhance the performance of the CCC. Amongst others, partners and stakeholders include the National and Provincial DPW's and the CIDB.
Emerging contractors as well as established contractors can only benefit by making use of the CCC.

(CCC brochure: 2009)

5.7 Summary and conclusion:

To develop the construction industry a government department, The National Department of Public Works (NDPW), was tasked to develop a corrective strategy. Subsequently a Construction Industry Development Board (CIDB) Act was agreed in 2000 thus establishing a statutory body aimed at driving an integrated Construction Industry Development strategy. The CIDB has established the construction industry development strategy, performance targets and key performance indicators.

(Sihle 2002:2)

The South African Construction Excellence Model (SACEM) is a contractor performance assessment tool. But more than just a tool, it is a comprehensive, systematic model intended to promote the concept of ‘total quality management’ at both the corporate level as well as the construction site level.

(Sihle 2002:4)

The Department of Public Works (DPW) aims to promote the government’s objectives of economic development, good governance and rising living standards and prosperity by providing and managing the accommodation, infrastructure needs of national departments, by leading the national Expanded Public Works Programme and transformation of the construction and property industries.

(Public Works website 2009)

The National Department of Public Works initiated the National Construction Week in 2006, a nation-wide awareness campaign to promote the image and
profile of the construction industry as a transforming sector capable of meeting and realizing transformation goals of the state.

(Public Works website 2009)

The Construction Industry Development Board (CIDB) promotes a regulatory and developmental framework that builds the construction delivery capability for South Africa’s social and economic growth and promotes a proudly South African construction industry that delivers to globally competitive standards.

(CIDB website 2009)

The Construction Contact Centre (CCC) is to provide clients, stakeholders, partners and Construction Industry Development Board (CIDB) registered contractors with a one stop construction support service. This concept is an initiative by CIDB and the National and Provincial Departments of Public Works (DPW’s) in support of contractors and construction industry development.

(CCC brochure: 2009)

In conclusion the research has shown that the Government has established certain departments, boards, structures etc. that plays a crucial role in the growth, performance and finally the development of the Construction industry in South Africa.

5.8 **Statement of the hypothesis:**

Yes, a certain amount of development takes place through the CIDB and other organisations and the role they play in the industry.

5.9 **Testing of the hypothesis:**

In the research undertaken on the governmental promotion of development in the construction industry, the hypothesis has been proven to be true.
Yes, the South African Government, through the National Department of Public Works, the Construction Industry Development Board and other role players and structures, promotes definite development in the construction industry.
Chapter 6: Conclusion:

6.1 Statement of the main problem:

*Does the government have a positive or negative influence in the South African construction industry?*

6.2 Summary of the conclusions of the various sub-problems:

6.2.1 Sub-problem 1: Are Private and Public Partnerships essential to the construction industry?

The government of South Africa is dedicated to delivering quality infrastructure and related services in line with its commitment to ensuring a better life for all. (Manual 2007: 7)

The main reason for using PPP’s is that they can deliver better value for money for government than traditional procurement. (Manual 2007: 7)

The use of PPP models for projects with significant scope in South Africa, offers the benefits of added finance for infrastructure and efficiency gains in construction and operation, while allowing the public sector to keep long-term strategic control of infrastructure. (Chege 2001: 7)

PPPs in South Africa are an important service delivery mechanism because they can assist in rapid infrastructure delivery. In the South African context, the promotion of black economic empowerment (BEE) is another important consideration for pursuing PPP procurement models.
6.2.2 Sub-problem 2: Is there positive growth, through the Government, in the Construction Industry by creating jobs and promoting training and economic welfare?

CETA’s primary objective is to influence the course of training and skills development in the construction sector. Various skills development projects and learner ships are initiated with a view of developing a pool of skilled and motivated construction workforce whose skills are recognised and valued in terms of the National Qualifications Framework (NQF). Their principal area of operation is initiating and promoting skills development and learner ships in South Africa.

(CETA website)

Even if there is uncertainty about exact employment figures it can be certain that the planned investment in construction and refurbishment will have an important employment effect that will be much higher than other sectors.

(Kolev 2009: 5)

The additional infrastructural spending associated with hosting football's showcase event has been projected at R10, 7-billion and it has been suggested that thousands of work opportunities will be created.

(Creamer 2005: 1)
6.2.2 **Sub-problem 3: Are there effective communication between the government and the different bodies in the construction industry, regarding the funding and getting the work done?**

According to Mrs Louise van den Heever, communication within the Government departments (especially the National Department of Public Works) takes place in various ways. The Head office of the DPW reports directly to the Minister of Public Works.

There are provincial and national departments.

The Project Budget Administration unit manages the budgets allocated to it. There is a PBA unit in every Regional Office and this unit have to manage the Capital Works and Planned Maintenance budgets allocated to them. The PBA must monitor expenditure and report any possible over or under expenditure.

The channels of communication are extensive and well established, whether they are used correctly by the end user, will be the downfall or the ultimate success of the projects entertained by it.

6.2.3 **Sub-problem 4: Does the government improve the performance and development of the construction industry?**

To develop the construction industry a government department, The National Department of Public Works (NDPW), was tasked to develop a corrective strategy.

Subsequently a Construction Industry Development Board (CIDB) Act was agreed in 2000 thus establishing a statutory body aimed at driving an integrated Construction Industry Development strategy. The CIDB has established the construction industry development strategy, performance targets and key performance indicators.
The Department of Public Works (DPW) aims to promote the government’s objectives of economic development, good governance and rising living standards and prosperity by providing and managing the accommodation, infrastructure needs of national departments, by leading the national Expanded Public Works Programme and transformation of the construction and property industries.

(Public Works website 2009)

The Construction Industry Development Board (CIDB) promotes a regulatory and developmental framework that builds the construction delivery capability for South Africa’s social and economic growth and promotes a proudly South African construction industry that delivers to globally competitive standards.

(CIDB website 2009)

The Construction Contact Centre (CCC) is to provide clients, stakeholders, partners and Construction Industry Development Board (CIDB) registered contractors with a one stop construction support service. This concept is an initiative by CIDB and the National and Provincial Departments of Public Works (DPW’s) in support of contractors and construction industry development.

(CCC brochure: 2009)

In conclusion the research has shown that the Government has established certain departments, boards, structures etc. that plays a crucial role in the growth, performance and finally the development of the Construction industry in South Africa.
6.3 **Conclusion of the main problem:**

Out of the four sub-problems that the research was undertaken on, three (sub-problems 1, 3, 4) out of these four problem’s hypothesis, has been proven to be correct, with one (sub-problem 2) to be partially correct.

Public and Private Partnerships are indeed essential to the construction industry. PPP’s can deliver better value for money for government, than traditional procurement. The increased uses of these models are definitely the answer to financing problems of projects with a large scope.

The communication networks within government are well established and there are various channels that are in place and used to ensure that effective communication can take place.

There is indeed control over what is done with the funding of projects and various departments are in control thereof and manage these funds.

The South African Government, through the National Department of Public Works, the Construction Industry Development Board and other role players and structures, promotes definite development in the construction industry.

It is proven that CETA does their part by ensuring development in the skills and training of participants in the industry.

It is also a well-known fact that all the infrastructure upgrades undergoing in South Africa is a more than positive job creation tool.

Although government is responsible for a part of the growth in these departments of the industry, more can be done by government to ensure exceptional growth and job creation, that will not only last until 2010, but will sustain long after that.
In conclusion to this treatise it has been found that the South African Government does in fact have a positive influence on the construction industry.
**Bibliography:**


Internet:

