

## Maintenance and Sustainability of State Infrastructure; How this should be used to support Contractor Development

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cidb

27 May 2010



### Overview

- **How this should be used to support Contractor Development**
- **Background**
- **Structure of Industry**
  - “Who”
- **Investment in Maintenance**
  - “How Many”
- **Contractor Development**
  - “How”
- **Tools & Guidelines**
- **Concluding Comments**

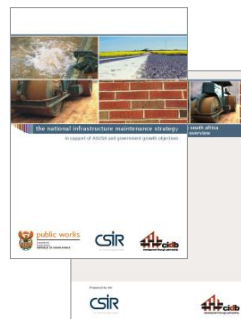


## Background



## State of Public Infrastructure Maintenance; 2006

- **Assessment of the state of public infrastructure maintenance**



## State of Public Infrastructure Maintenance

Category	Description	Description
A	Adequate and/or improving maintenance	SANRAL, national government public buildings, DWAF, ACSA, Eskom, Telkom, Transnet, some provincial roads, some provincial health and education, some municipalities, some water boards
B	Inadequate maintenance and/or deteriorating	Some provincial roads, some provincial health and education, most municipalities, some water boards



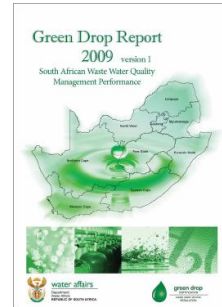
## SAICE Report Card; 2006

Topic	Grade	Description
Water	D+	Water supply and distribution is generally adequate, but there are significant shortages in some areas, particularly in the Western Cape and parts of the Eastern Cape. The Department of Water Affairs and Forestry (DWAF) has implemented a number of measures to improve water efficiency and reduce losses, but more needs to be done to ensure a sustainable water supply for all South Africans.
Sustainable Procurement	D+	The Public Procurement Act (PPA) of 2002 has been implemented, but there are still significant challenges in ensuring that the PPA is fully and effectively implemented. The Department of Public Works and Enterprise (DPWE) has taken steps to improve procurement practices, but more needs to be done to ensure that the PPA is fully and effectively implemented.
Solid waste management	C-	Solid waste management is a major challenge for South Africa, with most municipalities struggling to provide adequate services. The Department of Environmental Affairs and Tourism (DEAT) has implemented a number of measures to improve solid waste management, but more needs to be done to ensure that all municipalities are able to provide adequate services.
Roads	C	Roads are a major infrastructure asset for South Africa, and the Department of Transport and Road Safety Management (DTRSM) has implemented a number of measures to improve road maintenance and safety. However, there are still significant challenges in ensuring that all roads are properly maintained and that road safety is improved.
Airports	D-	Airports are a major infrastructure asset for South Africa, and the Department of Transport and Road Safety Management (DTRSM) has implemented a number of measures to improve airport operations and safety. However, there are still significant challenges in ensuring that all airports are properly maintained and that airport safety is improved.
Ports	B	Ports are a major infrastructure asset for South Africa, and the Department of Transport and Road Safety Management (DTRSM) has implemented a number of measures to improve port operations and safety. However, there are still significant challenges in ensuring that all ports are properly maintained and that port safety is improved.
Rail	C+	Rail is a major infrastructure asset for South Africa, and the Department of Transport and Road Safety Management (DTRSM) has implemented a number of measures to improve rail operations and safety. However, there are still significant challenges in ensuring that all rail services are properly maintained and that rail safety is improved.
Electricity	D+	Electricity is a major infrastructure asset for South Africa, and the Department of Energy has implemented a number of measures to improve electricity supply and safety. However, there are still significant challenges in ensuring that all areas have access to electricity and that electricity supply is reliable.
Telecommunications	C+	Telecommunications is a major infrastructure asset for South Africa, and the Department of Communications and Electronic Information (DCEI) has implemented a number of measures to improve telecommunications services and safety. However, there are still significant challenges in ensuring that all areas have access to telecommunications services and that telecommunications services are reliable.
Transport and safety	C-	Transport and safety is a major infrastructure asset for South Africa, and the Department of Transport and Road Safety Management (DTRSM) has implemented a number of measures to improve transport and safety. However, there are still significant challenges in ensuring that all transport services are properly maintained and that transport safety is improved.
Overall Grade	D+	



## Green Drop Report; 2009

- ..... the situation with regard to waste water treatment and compliance with the respective Water Acts must be addressed as a matter of urgency
- The municipal waste water services business is generally considered to be far from acceptable
- 55% of systems rated require drastic improvement



## Road Maintenance Fund; 2010

### Roads repair bill tops R75bn, says Ndebele

SARAH HUDLESTON

PUBLISHED: 2010/05/25 06:26:22 AM

THE dire state of SA's roads was laid bare yesterday by Transport Minister Sibusiso Ndebele, who warned that investment of R75bn was needed over the next five years to arrest the decline.

Ndebele, speaking at a roads construction and maintenance summit in Johannesburg, said 40% of provincial roads had reached "crisis point" and needed to be rebuilt, and 80% of roads were older than the 20 years they were designed for.

The deteriorating road infrastructure adds to the cost of business in SA as a large proportion of goods are transported on the road network.

To arrest the decline, a dedicated maintenance fund will be created from public-private partnerships and funding from the government.

**BusinessDay**  
NEWS WORTH KNOWING



How this should be used to support Contractor  
Development

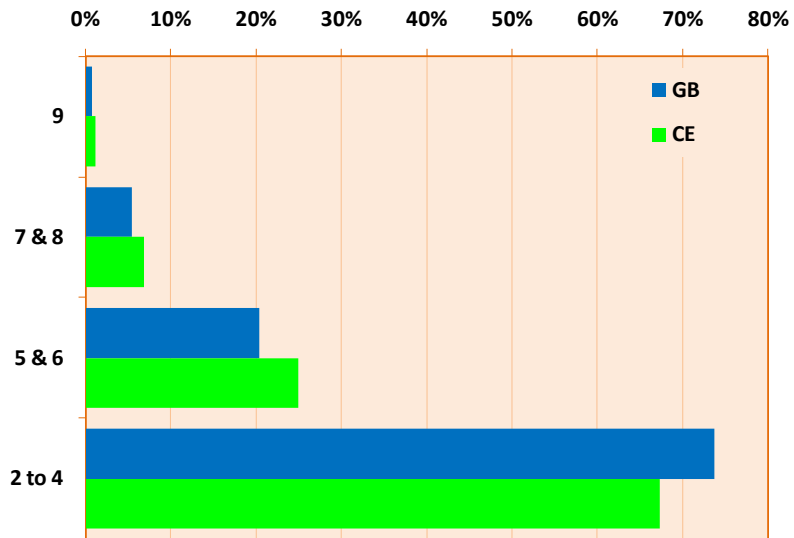


Structure of the Industry

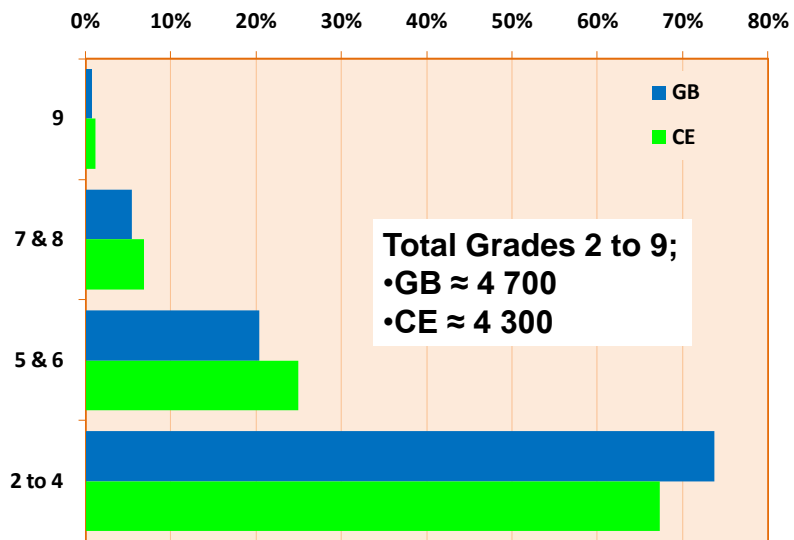
“Who”



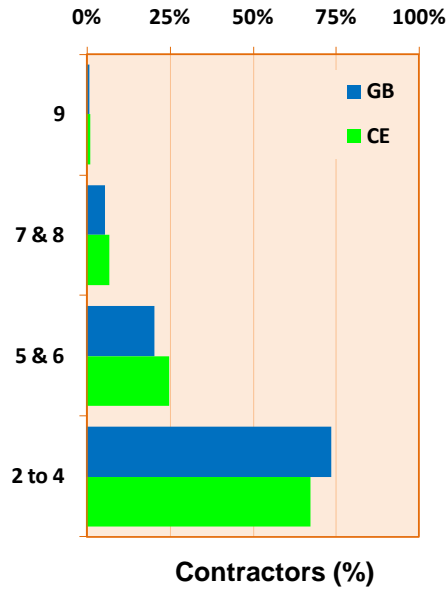
### Number of Contractors; GB/CE (2010/03)



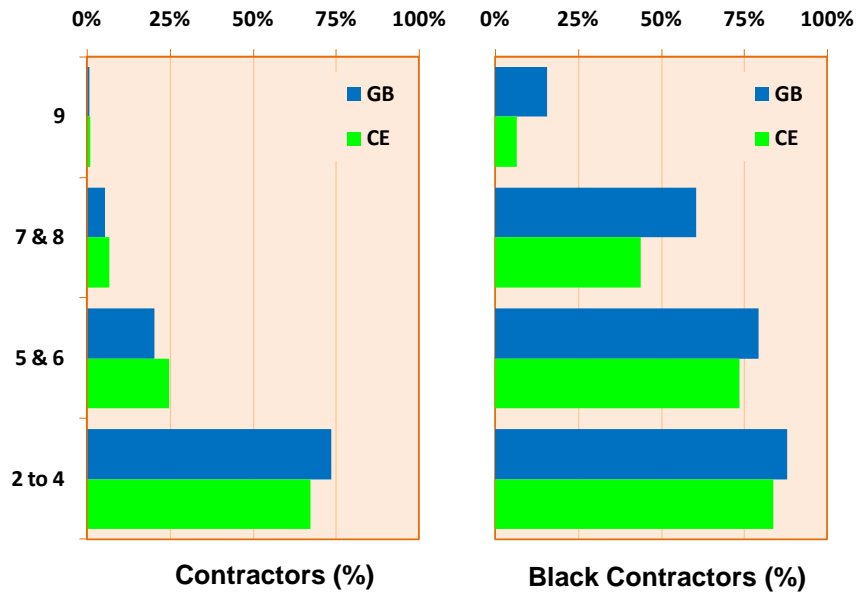
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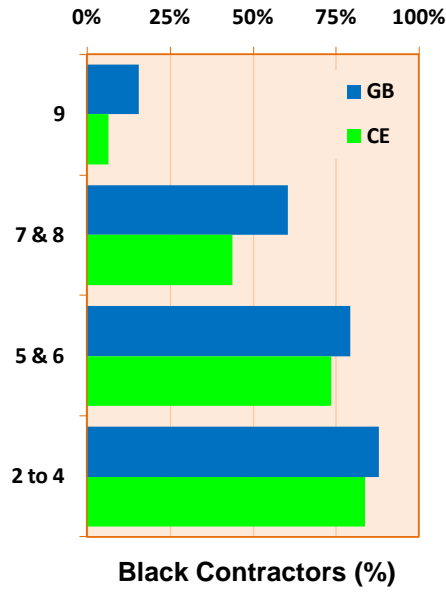
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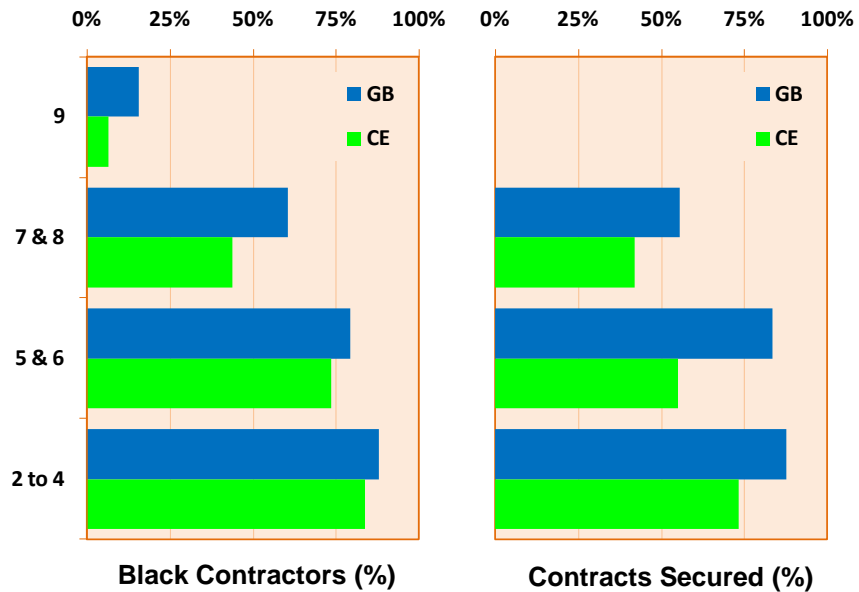
### Black Ownership (>50%); GB/CE



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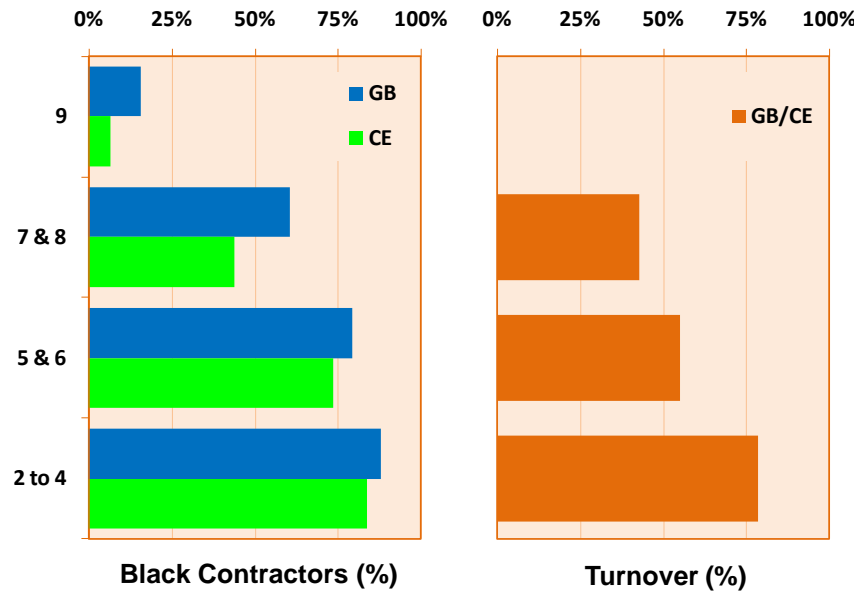


### Contracts Secured – Black Owned; GB/CE



cidb iTender; Limited data

### Turnover – Black-Owned; GB/CE



### Black Ownership; All CoW

Grades	GB	CE	ME	EB	EP	SW
9	14%	5%	0%	0%	0%	0%
7 & 8	60%	39%	27%	55%	21%	24%
5 & 6	80%	72%	44%	56%	55%	45%
2 to 4	92%	90%	56%	77%	63%	71%
1	98%	97%	88%	86%	89%	93%

## “Who”

- **How this should be used to support Contractor Development**
- Transformation and development needs to focus **across all Grades** and all Classes of Works;
  - not only lower Grades



## Maintenance Spending

### “How Many”

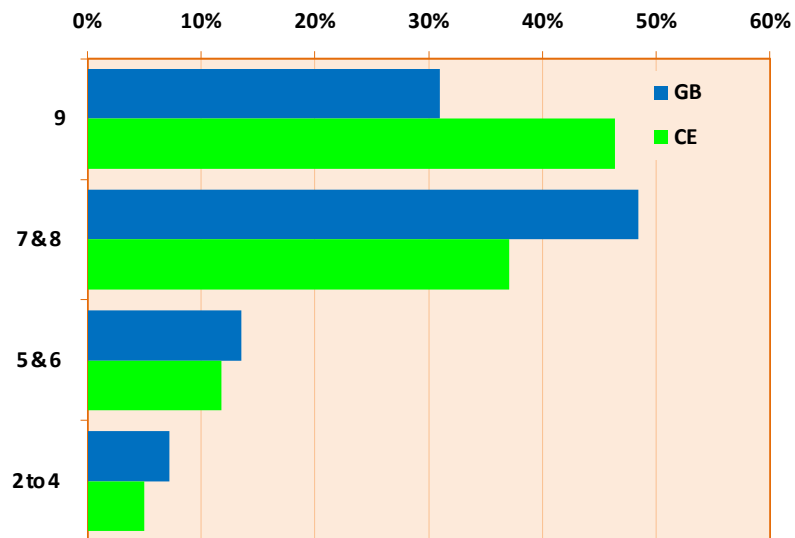


## Maintenance Spending

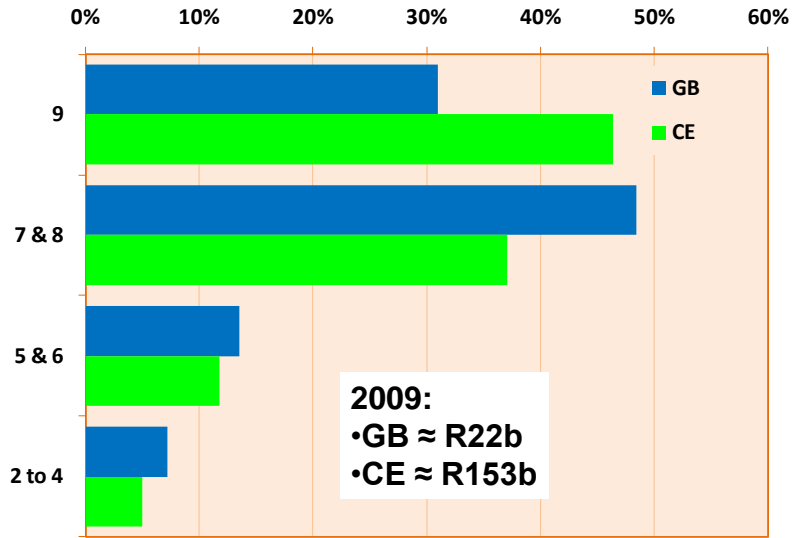
- Information limited
- Standard Chart of Accounts (SCOA);
  - inclusion of appropriate line items relating specifically to infrastructure maintenance
- Budget Guidelines
- Industry Insight



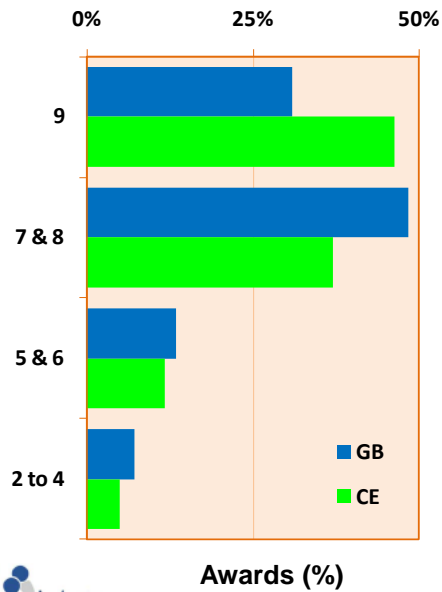
## Public Sector Awards (2007 to 2009)



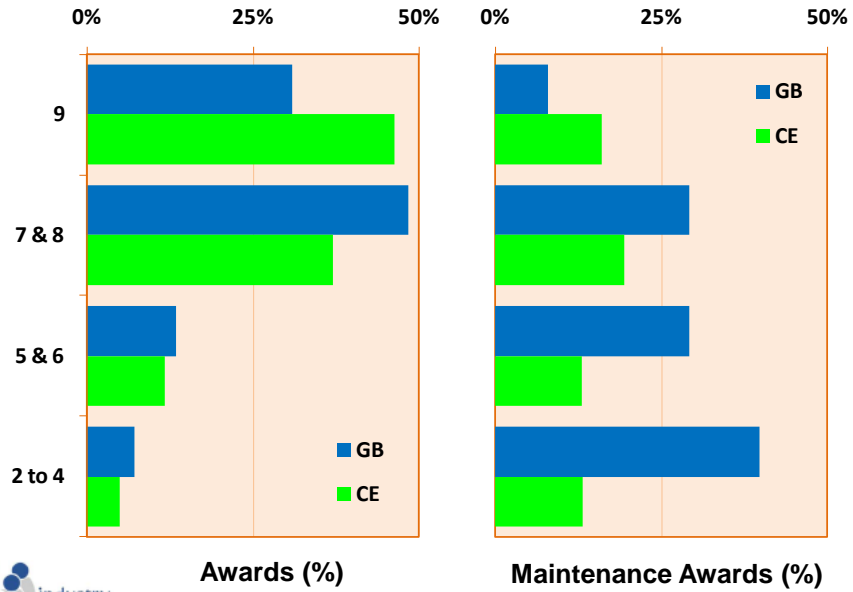
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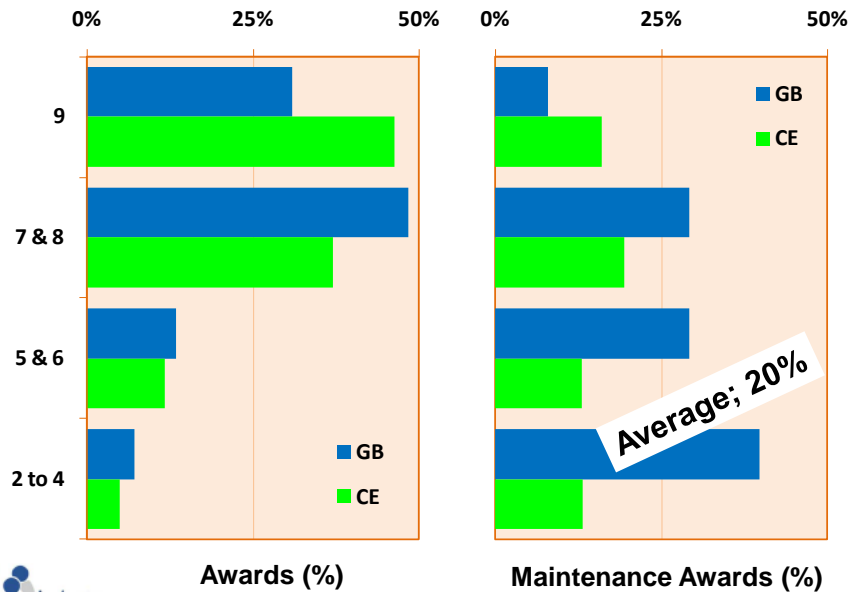
## Public Sector Awards



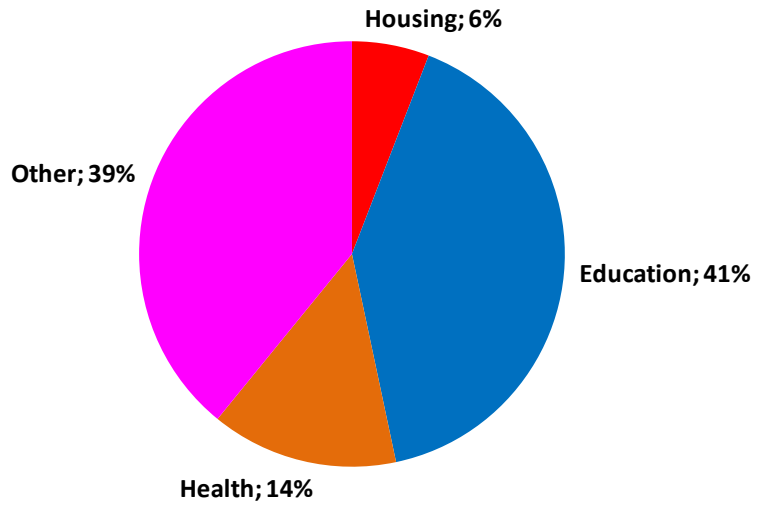
## Maintenance Contracts



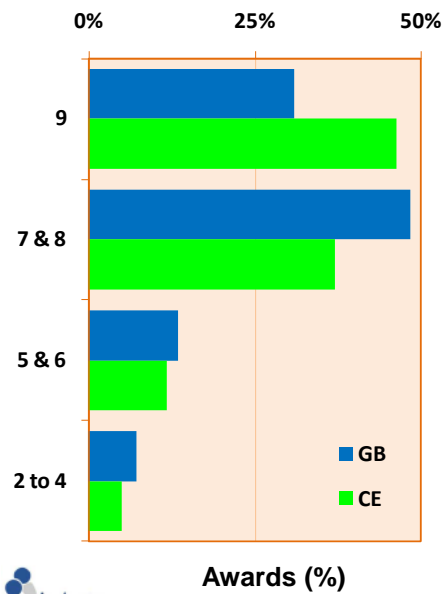
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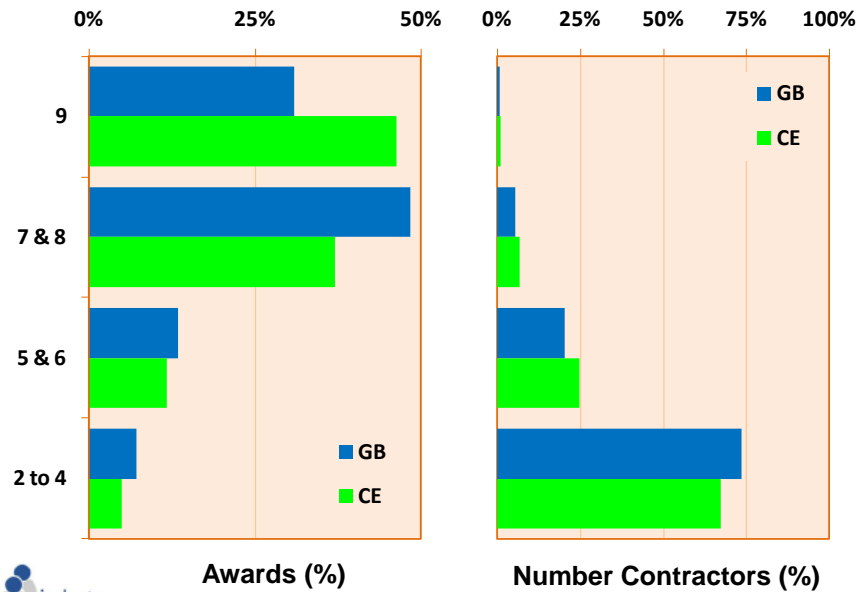
## Maintenance Awards; GB (2007 to 2009)



## Public Sector Awards



## Number of Contractors



## Greenfields vs. Brownfields

- **Maintenance, typically:**
  - less equipment intensive
  - shorter duration
    - not always
  - less trades involved
  - public interactions

## “How Many”

- **How this should be used to support Contractor Development**
- **Maintenance contracts supporting contractor development must extend across all tender Grades**
  - Lower Grades very competitive



## Contractor Development

### “How”



## Contractor Development

- Some thoughts / concepts



## National Contractor Development Programme

- ncdp Framework
- SA Contractor Development Programmes; Status Quo Report
- ...

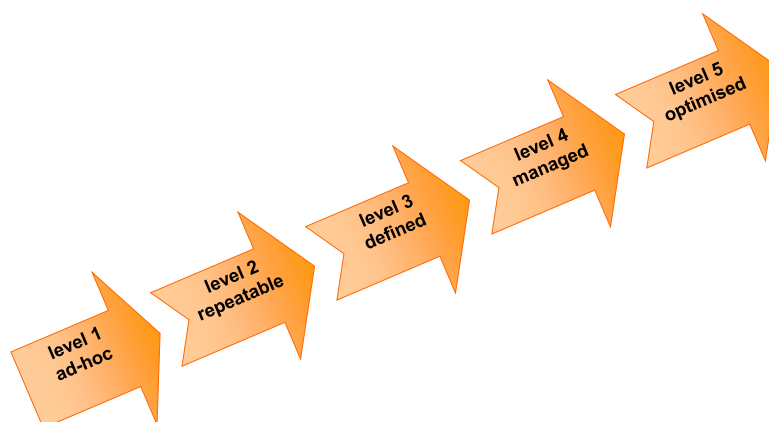


## Contractor Development

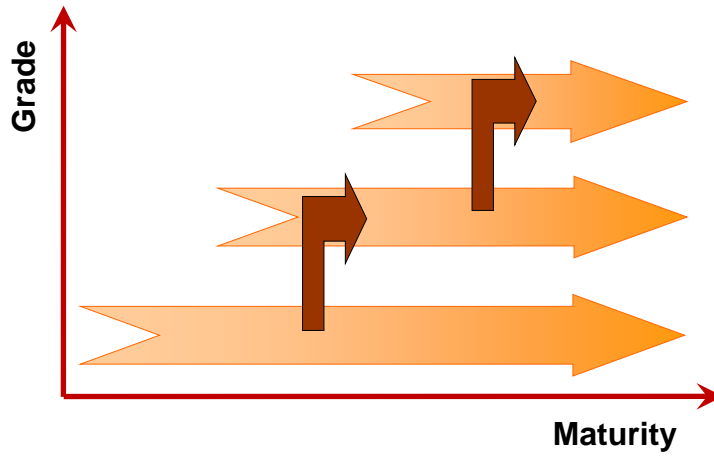
- **Preferential Procurement ≠ Contractor Development**
  - Preferential Procurement is a component of Contractor Development
- **Contractor Development = Deliberate targeted outcomes;**
  - increased capacity
  - increased competence
  - cidb Grade / recognition



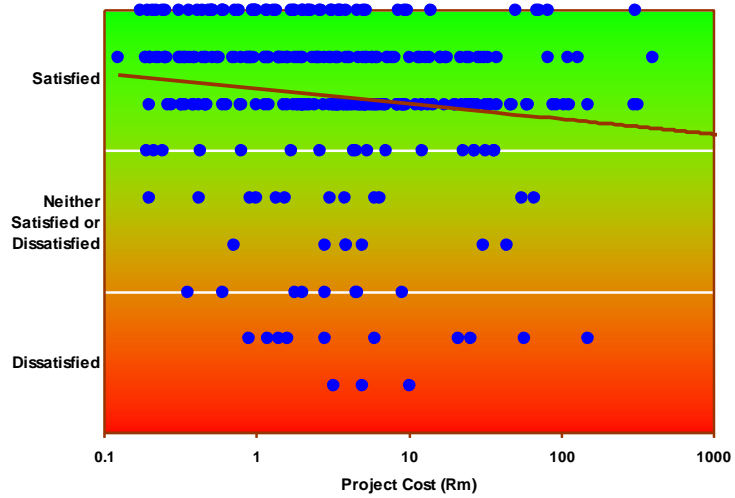
## Capability Maturity Model



## Capability Maturity Model



## Client Satisfaction; Contractor



## Contractor Development Mechanisms



## Contractor Development Mechanisms

- **Contractor Development Programmes (CDPs)**
- **Supply Chain Development (SCD)**
- **JVs**
- **Skill development**
- **.....**

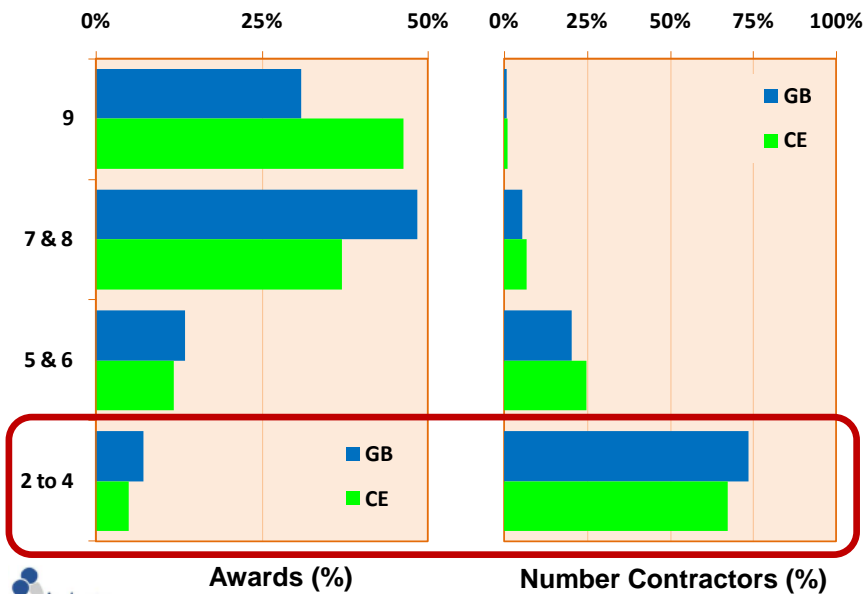


## Contractor Development Mechanisms

- **Contractor Development Programmes (CDPs);**
  - NDPW CIP, eThekweni Vukupile, etc
  - targets largely Grades 1 to 4
  - outcomes largely not specified
- **SA Contractor Development Programmes; Status Quo Report**



## Contractor Development

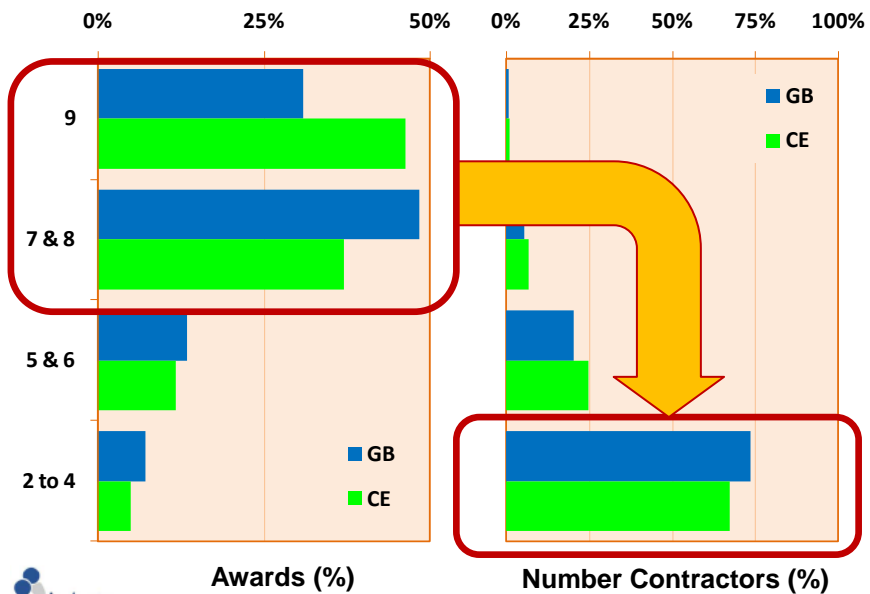


## Contractor Development Mechanisms

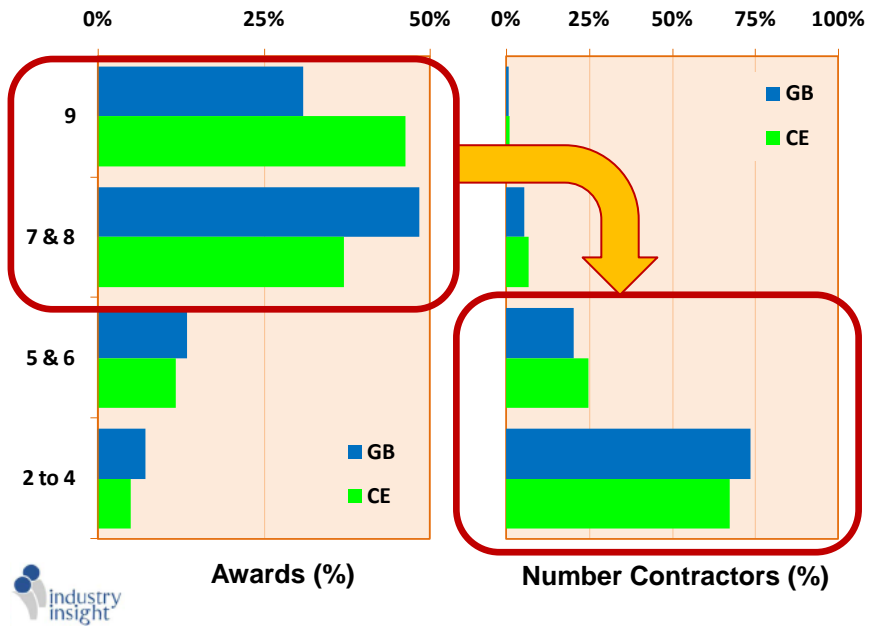
- **Supply Chain Development (SCD);**
  - eThekweni Large Contractor Model
  - nominated subcontractors
  - Grades 2 to 4



## Contractor Development



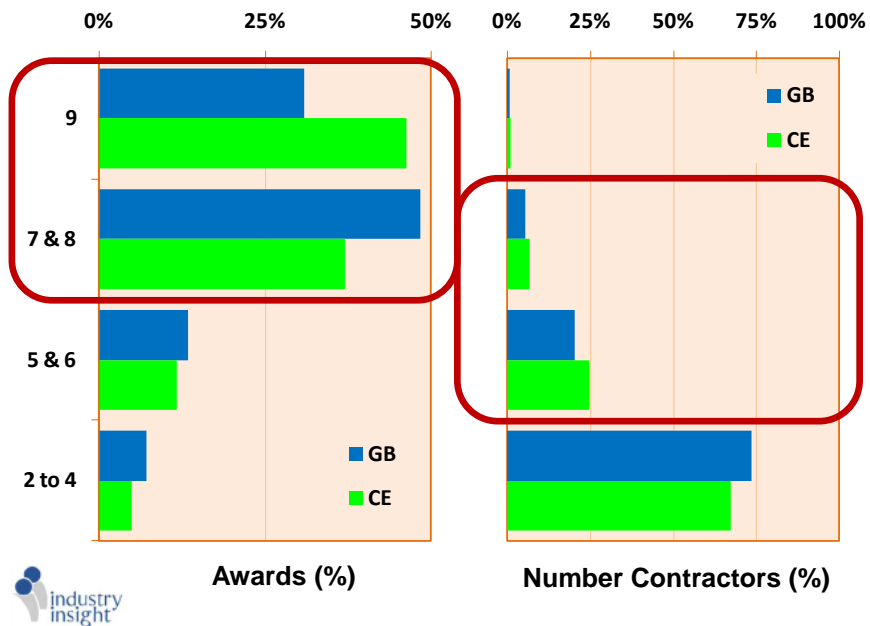
## Contractor Development



## Contractor Development Mechanisms

- **JVs;**
  - limited public sector models
  - private sector driven?
    - SAFCEC etc
  - Grades 5 to 8

## Contractor Development



## “How”

- **How this should be used to support Contractor Development**
- **Focus must extend across all Grades**
- **A range of options are available**
- **Procurement mechanisms very important**

## Tools & Guidelines



## Targeting Guidelines

- **Target Groups:**
  - Ownership
  - Supply and demand
  - Performance improvement
  - Local economic objectives



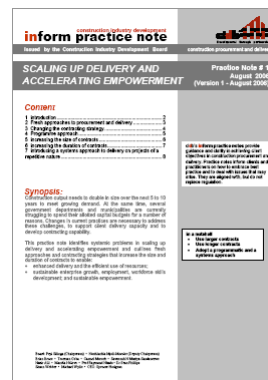
## Targeting Guidelines

- **Target Groups:**
  - Ownership
  - Supply and demand
  - Performance improvement
  - Local economic objectives
- **Target Numbers:**
  - **Affordability and sustainability**



## Procurement; Scaling Up Delivery

- **cidb Practice Note 1; Scaling Up Delivery and Accelerating Empowerment**



## Developmental Outcomes

- a higher cidb grade; and/or
- recognition on the cidb *Best Practice Contractor Recognition Scheme*;
  - competence
  - systems
  - performance



## cidb Contractor Competence Accreditation

Category	Grade	NQF Level	Minimum Experience
•GB: General Building; Limited	4 to 6	5	5 years
•CE: Civil Engineering; Limited	2 & 3	4	3 years
TC: Trade Contractor	1 to 5	3 or 4	3 years



## cidb Contractor Competence Accreditation

Grade	Minimum NQF level	Recognised Qualifications
<b>Building and Construction Technology</b>		
4 to 6	5	National Diploma: Management of Civil Engineering Construction Processes; 23683
2 and 3	4	National Certificate: Supervision of Construction Processes; 49053
<b>Building and Construction Legislation</b>		
4 to 6	4	[to be written]
2 and 3	2	Unit Standard 9982; Comply with legal requirements for a construction contract



## cidb Construction Management Systems

- **cidb CMS standard based on recognisable industry minimum standards covering:**
  - health and safety management
  - quality management
  - environmental management (covering air, water, land and waste)
- **Allows for upgrading to ISO & OHSAS**



## Construction Management Systems



## Procurement; Supply Chain Development

- eThekweni Large Contractor Model
- **cidb** *Best Practice Project Assessment Scheme*
- specifying developmental outcomes
  - draft

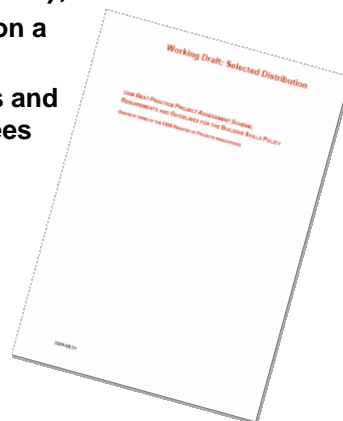


## Franchising



## Skills Development

- **cidb Building Skills Policy (Draft);**
  - dedication of ..... labour hours on a project
  - for workplace training of interns and up-skilling of company employees
  - in programmes that result in nationally accredited outcomes
    - internships
    - learnerships
    - accredited skills programmes



## Concluding Comments



## Summary

- How this should be used to support Contractor Development



## Summary

- **How this should be used to support Contractor Development**
- **Focus must extend across all tender Grades and contractor Grades;**
  - preoccupation with Grades 1 to 3?



## Summary

- **How this should be used to support Contractor Development**
- **Focus must extend across all tender Grades and contractor Grades**
- **Must be affordable and sustainable;**
  - Development programmes with 18 000 contractors will not work



## Summary

- **How this should be used to support Contractor Development**
- **Focus must extend across all tender Grades and contractor Grades**
- **Must be affordable and sustainable**
- **Range of opportunities exist, with supporting guides and tools;**
  - procurement driven models important
  - developmental outcomes important



## Summary

- **How this should be used to support Contractor Development**
- **Focus must extend across all tender Grades and contractor Grades**
- **Must be affordable and sustainable**
- **Range of opportunities exist, with supporting guides and tools**
- **Commitment and follow-through is often lacking?**



**Thank You**

