



25 March 2013

# **Bi-Annual Economic and Capacity Survey**

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**July - December 2012**

Published by  
The Consulting Engineers South Africa (CESA)

March 2013

Report prepared by

Industry Insight CC  
[www.industryinsight.co.za](http://www.industryinsight.co.za)

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# 1. Economic overview

## 1.1 International Developments

There are signs of improvement in the global economy, although many economies remain in uncertain territory. Several advanced economies contracted during the 4<sup>th</sup> quarter of 2012, and global growth prospects are expected to improve only marginally, from 3,2% in 2012 to 3,5% in 2013.

- United States – growth forecast to average 2% in 2013, supported modestly by a recovery in the housing sector. Interest rates are expected to remain in place, as unemployment remains high.
- United Kingdom – growth expected to improve from an expected -0.2% in 2012 to 1.0% in 2013
- Euro – the near term outlook has been revised downward, expected to contract by 0.2% in 2013. Conditions worsened during the second half of 2012.
- Middle East and North Africa – growth projected to slow from 5,% in 2012 to 3.4% in 2013, due to ongoing political violence especially in the middle east
- Brazil – economic growth expected to accelerate in 2013 from 1.0% in 2012 to 3.5%
- Russia – Stable growth predicted for Russia, improving only modestly from 3.6% in 2012 to 3.7% in 2013
- India – one of the major growing economies, predicted to grow by 5,9% in 2013 (from 4.5% in 2012)
- China – Growth in China is likely to accelerate further in 2013 to 8,9%
- South Africa – growth expected to improve modestly from 2.3% in 2012 to between 2.5% and 2.8% in 2013
- Emerging markets – overall economic growth is on track for emerging market and developing economies to reach 5% in 2013 (noting that the growth outlook for South Africa is well below that). Emerging economies are still expected to grow at rates well above those achieved within the advanced economies.
- Global growth is expected to strengthen gradually through 2013, averaging 3,5% in 2013, a moderate uptick from 3,2% expected for 2012. Should the Euro economy rebound, global growth could be strengthened to 4,1% growth in 2014.

**Table 1: Global Growth projections**

	2009	2010	2011	2012	2013	2014
<b>World</b>	<b>-0.80%</b>	<b>5.00%</b>	<b>3.80%</b>	3.50%	3.50%	4.10%
<b>US</b>	-2.50%	2.80%	1.80%	1.80%	2.00%	3.00%
<b>Eurozone</b>	-3.9%	1.80%	1.60%	-0.40%	-0.20%	1.00%
<b>UK</b>	-4.80%	1.70%	0.90%	0.20%	1.00%	1.90%
<b>China</b>	8.70%	10.30%	9.20%	7.80%	8.20%	8.50%
<b>Sub-Saharan Africa</b>	1.60%	5.00%	4.90%	4.80%	5.80%	5.70%
<b>South Africa</b>	<b>-1.80%</b>	<b>2.70%</b>	<b>3.40%</b>	<b>2.05%</b>	<b>2.70%</b>	<b>3.50%</b>

Source: 2010,2011,2012, 2013 Budget Reviews

## 1.2 Domestic Economy

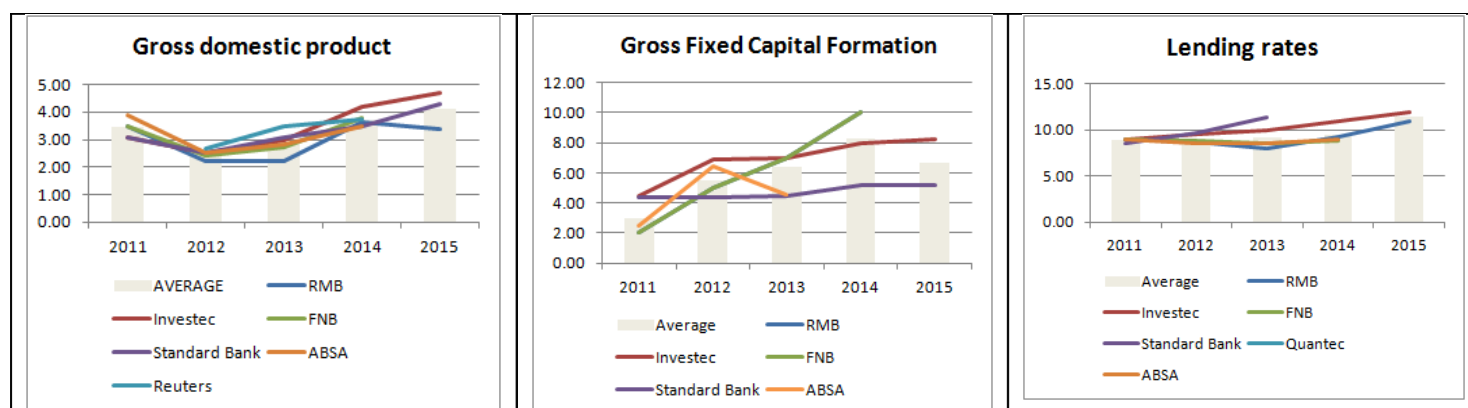
The South African economy grew by an estimated 2,5% in 2012 and is expected to grow by 2,7% in 2013, 3,5% in 2014 and 3,8% in 2015. Treasury expects the gradual improvement (well below expectations in the 2012 Budget, and remaining below 4%), is expected to be supported by “robust” investment spending and rising exports as global trade gathers pace. The robustness of investment growth is questioned, hampered by financial constraints, while export growth is largely dependent on higher levels of demand from Africa. The current account deficit is projected to fall from 5,2% in 2012 to 3,2% in 2015, using similar assumptions of an improved trade balance on the back of growth in export demand, coupled with fiscal prudence. An important sector to consider in this scenario is the mining sector, already crippled by further strikes in the first quarter of 2013.

The outlook for household consumption (the largest contributor to GDP at 60%), is however modest (below 4% growth predicted over the medium term) because of the impact of sluggish job creation, unemployment, and elevated levels of household debt.

Implementation of the national infrastructure programme will more than likely show a higher than average increase in public sector gross fixed capital formation, supporting higher GDP growth. Much of these investments, particularly from SOE (State owned enterprises) will however be used to finance largely imported equipment, and do little to stimulate job creation in the construction sector. Treasury also expects a modest recovery in private sector investment, as well an improvement in housing construction after five years of contraction. Inventory re-stocking will also temporarily support higher levels of investment.

The current account deficit is projected to “improve” from 5,2% in 2012 to 3,1% in 2015, but based on Treasury expectations it is clear that spending will surpass revenue for the foreseeable future. Over R200bn will be borrowed via domestic bonds in 2013/14. South Africa’s sovereign debt rating hangs in the balance as the country financial position (hampered by higher levels of political instability) is increasingly regarded as being “risky”.

**Table 2: Macro economic forecasts: 2013Q1**



**Table 3: Macro economic growth projections (Economist Poll)**

<i>Macro Economic Forecasts</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>
GDP	3.5	2.5	2.9	3.7	4.1	4.5
Household consumption	4.8	4.0	4.2	4.1	4.2	4.6
Government consumption	4.5	4.1	4.0	4.2	4.0	4.0
Gross Fixed capital formation	3.0	5.5	6.4	8.3	6.7	7.1
US/ZAR	7.3	8.2	8.3	8.3	9.1	9.1
CPI Inflation	4.9	5.6	5.5	5.3	5.6	5.4
Prime Lending rate	8.9	8.7	9.2	9.5	11.5	11.5

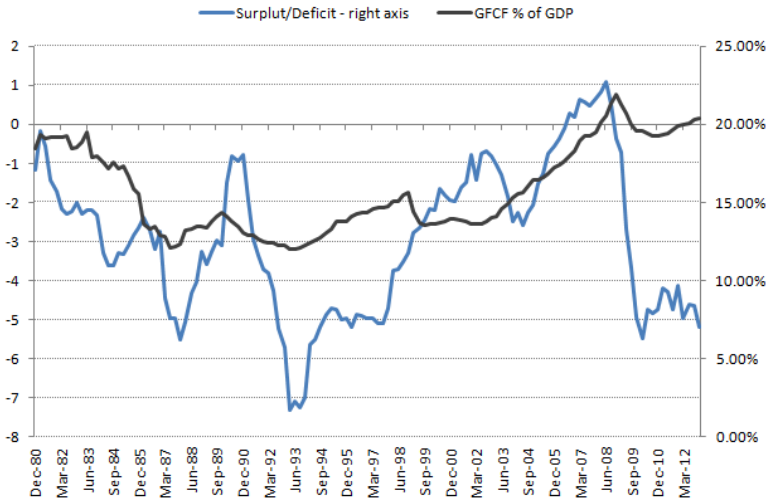
Poll: RMB, Investec, FNB, Standard Bank, Quantech, Treasury (2013 Budget Review)

### 1.3 Gross fixed capital formation

Real gross fixed capital formation increased by 6,4% in 2012, from 4,5% in 2011, due mainly to strong growth in public-sector fixed capital formation, off set against a marked decline in private sector investment. Public sector capital spending grew by 11% during the first nine months of 2012 as a result of major Eskom and Transnet projects, provincial investment in roads and hospitals and local government road and housing projects, according to Treasury. Private sector investment

increased by 4,5%, pulled down by the slump in the mining sector and low levels of investment in inventory. Strikes, ratings downgrades and policy uncertainty are listed by the Treasury as factors contributing to reduced confidence which postponed

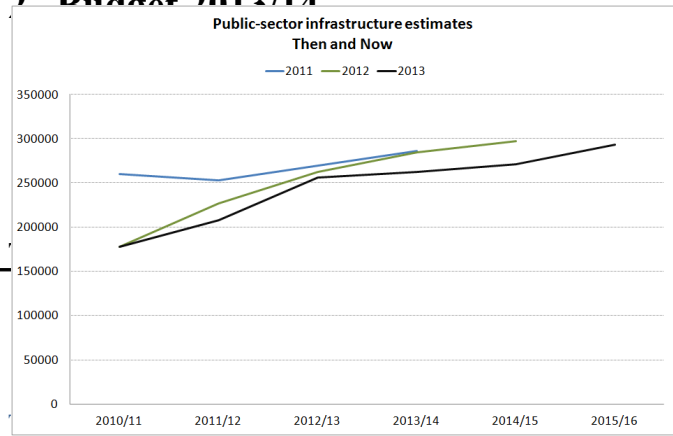
**GFCF and the current account deficit**



private sector investment decisions. Confidence is an essential element to stimulate private sector investment, alongside affordability. Affordability includes primarily access to finance, either by means of savings or borrowings.

**Figure 1: GFCF and the current account deficit**

**2 Budget 2013/14**



# Governments R827 billion plan

	Estimates, Rm current prices											
	2012/13	2013/14	2014/15	2015/16	2013 MTEF	2012 MTEF	2011 MTEF					
	55905	262811	271080	293187	827078	844300	808607					
<b>% of GDP</b>	6.25%	8.47%	9.60%	6.7%	7.1%	8.1%	7.6%	7.2%	7.0%	7.3%	7.70%	8.40%
<b>Y-Y %</b>												
<b>Chg (nominal)</b>	55.7%	50.9%	19.7%	-24.52%	17.34%	22.86%	2.70%	3.15%	8.16%	4.67%		

Source: Budget Expenditure Reviews

**Figure 2: Public Sector Infrastructure Estimates: Then and Now**

**Key challenges:**

- Corruption
- Management of SOE's
- Procurement and project implementation
- Capacity
- Labour unrests / Strikes
- Price pressures (construction costs, inflation)
- Economic growth estimates may disappoint
- Shifting horizons (funding moved / prioritised to end of MTEF period)
- Tighter control on release of conditional grants

Actual expenditure on infrastructure, including all three tiers of government, PPP's, and non-financial public enterprises (ACSA, Eskom, TCTA, Rand water, Transnet and CEF) increased by 17% in 2011/12, by an estimated 22,8% in 2012/13 and is projected to increase by only 2,7% in nominal terms during 2013/14, before accelerating to an annual increase of 3,2% and 8,2% in the following two years. Average growth in the next three years is projected to slow to 4,7% (not taking into account inflationary costs, which mean no real growth is predicted in public sector infrastructure estimates over the medium term expenditure framework period. Construction costs increased by 4,5% in 2012 and is expected to increase by between 5% and 8% in 2013.

Treasury acknowledged that there are many areas within government and the broader public sector where infrastructure delivery is weak, characterised by delays, poor planning, lack of project management capacity and inadequate oversight.

The contribution of public sector infrastructure expenditure to gross domestic product (GDP) slowed from an estimated 9,8% in 2010/11, to a revised 6,5% and is projected to average 7,7% of GDP in the next three years, much lower compared to an average of 8,4% projected in the 2011 Budget. Government's contribution (national, provincial and municipal) of the

total public sector infrastructure expenditure estimates was 39,7% in 2011/12 (down from 44% in 2010/11), projected to slow to 38% in 2014/15. Thus the role of government is projected to decrease in terms of its projected infrastructure commitment in the next three years.

**Table 5: Public Sector Infrastructure Estimates by client type**

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
	Actual	Actual	Actual	Outcome	Budget	Budget	Budget	Budget
National Departments	4882	5717	5799	6599	10802	11225	14046	14329
Provincial	34094	37280	39083	43449	43762	46202	49385	52098
Local Government	39577	39625	30945	33239	38489	46940	50506	53161
Extra-budgetary institutions	6194	8119	8671	15418	15697	21493	21909	23176
PPP	4942	13832	7308	10710	17955	7145	4504	13713
<b>Non-financial public enterprises</b>	<b>103322</b>	<b>99064</b>	<b>85992</b>	<b>98871</b>	<b>129200</b>	<b>129806</b>	<b>130730</b>	<b>136710</b>
Transnet	19300	18400	21500	21821	31183	37320	38815	48026
Eskom	43632	47524	44325	58815	76141	72107	68016	64934
SANRAL	-	-	-	5683	2012	1785	1620	2669
CEF	1987	1442	236	1209	5226	3719	2061	398
TCTA	651	290	352	1191	1659	1230	3068	1871
ACSA	5996	5241	505	0	0	0	0	0
Rand water	965	905	1012	1514	1352	2108	1966	1820
Other SOE's	30791	25262	18062	8638	11627	11537	15184	16992
<b>Total</b>	<b>193011</b>	<b>203637</b>	<b>177798</b>	<b>208286</b>	<b>255905</b>	<b>262811</b>	<b>271080</b>	<b>293187</b>
<b>Budget allocations 2008/09 – 2012/13</b>	<b>195809</b>	<b>245466</b>	<b>260405</b>	<b>226700</b>	<b>262300</b>			

**Table 6: Public Sector Infrastructure Estimates by client type: Year on year Percentage change (nominal)**

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
	Actual	Actual	Outcome	Budget	Budget	Budget	Budget
National Departments	17.1%	1.4%	13.8%	63.7%	3.9%	25.1%	2.0%
Provincial	9.3%	4.8%	11.2%	0.7%	5.6%	6.9%	5.5%
Local Government	0.1%	-21.9%	7.4%	15.8%	22.0%	7.6%	5.3%
Extra-budgetary institutions	31.1%	6.8%	77.8%	1.8%	36.9%	1.9%	5.8%
PPP	179.9%	-47.2%	46.6%	67.6%	-60.2%	-37.0%	204.5%
<b>Non-financial public enterprises</b>	<b>-4.1%</b>	<b>-13.2%</b>	<b>15.0%</b>	<b>30.7%</b>	<b>0.5%</b>	<b>0.7%</b>	<b>4.6%</b>
Transnet	-4.7%	16.8%	1.5%	42.9%	19.7%	4.0%	23.7%
Eskom	8.9%	-6.7%	32.7%	29.5%	-5.3%	-5.7%	-4.5%
SANRAL	-	-	-	-64.6%	-11.3%	-9.2%	64.8%
CEF	-27.4%	-83.6%	412.3%	332.3%	-28.8%	-44.6%	-80.7%
TCTA	-55.5%	21.4%	238.4%	39.3%	-25.9%	149.4%	-39.0%
ACSA	-12.6%	-90.4%	-	-	-	-	-
Rand water	-6.2%	11.8%	49.6%	-10.7%	55.9%	-6.7%	-7.4%
Other SOE's	-18.0%	-28.5%	-52.2%	34.6%	-0.8%	31.6%	11.9%
<b>Total</b>	<b>5.5%</b>	<b>-12.7%</b>	<b>17.1%</b>	<b>22.9%</b>	<b>2.7%</b>	<b>3.1%</b>	<b>8.2%</b>

**Table 7: Infrastructure expenditure 2009/10 – 2015/16**

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2013 MTEF
Infrastructure expenditure (Government) Current prices, Rm	74,891,000	80,985,600	97,440,800	103,963,300	115,879,600	130,152,800	349,995,700
Infrastructure expenditure Constant 2005 prices, Rm	47,700,149	48,433,773	55,499,879	54,676,763	57,657,358	59,962,193	172,296,314
Infrastructure expenditure Real Annual Change	9.3%	2.0%	14.6%	-1.2%	3.2%	4.0%	2.0% (avg)
Building cost index: 2005 = 100	184.9	196.4	206.8	217.4	217.4	217.4	
<b>Construction cost index: 2005 = 100: Annual percentage change</b>	4.0%	6.5%	5.0%	8.0%	5.7%	8.0%	7% (avg)
<b>Government contribution to total public sector infrastructure estimates</b>	<b>42.6%</b>	<b>40.0%</b>	<b>36.4%</b>	<b>39.7%</b>	<b>42.0%</b>	<b>40.8%</b>	<b>40.9%</b>

Source: Estimates of National Expenditure, Industry Insight

Government (Central, local and provincial) is playing a larger role in terms of infrastructure expenditure over the medium term from 36,4% (of total public sector infrastructure expenditure) to 42% by 2014/15. This means government will become a more important client to the industry over the next 24 months. Unless issues of poor spending are effectively dealt with, the impact on the industry will be more severe.

Price pressures are expected to erode available budgets in 2013/14 and if building costs increase by 7,5% or more, real growth is likely to be negative in 2013/14. At an average cost inflation of 7%, growth in government infrastructure spending (including all the different departments) is likely to be below 5%. (3,2% in 2014/15 and 4.0% in 2015/16). Some of the departments, for example infrastructure spending on water, are however offering exciting opportunities, where infrastructure spending is expected to increase by double digit rates in real terms over the next three years.

Below is a summary of key departments responsible for infrastructure spending, contributing 86% of total government infrastructure spending.

**Table 8: Selected Votes: Infrastructure Expenditure Estimates: Rm, current prices (not adjusted for inflation)**

<i>Department / Vote</i>	<i>2009/10</i>	<i>2010/11</i>	<i>2011/12</i>	<i>2012/13</i>	<i>2013/14</i>	<i>2014/15</i>	<i>2015/16</i>	<i>2013 MTEF</i>
<b>Transport</b>	16,955,100	18,916,000	22,346,100	26,273,600	27,240,500	32,478,500	36,767,900	96,486,900
<b>Human Settlements (including grants to provinces)</b>	15237400	18108700	18740000	23458800	26167500	28366100	30458300	84,991,900
<b>Cooperative Governance and Traditional Affairs (MIG)</b>	8727500	12528900	11443500	13881600	14060700	13803500	14406800	42,271,000
<b>Basic Education</b>	3884700	3242800	5597700	8096800	8807500	10563700	13215900	32,587,100
<b>Water Affairs</b>	1,976,000	2,604,200	3,454,000	5,048,300	6,263,300	8,189,200	10,193,500	24,646,000
<b>Health</b>	3347000	4257100	5683400	5384500	5847000	6337200	6526600	18,710,800



**Table 9: Selected Votes: Infrastructure Expenditure Estimates: Real Annual Change**

<i>Department / Vote</i>	<i>2009/10</i>	<i>2010/11</i>	<i>2011/12</i>	<i>2012/13</i>	<i>2013/14</i>	<i>2014/15</i>	<i>2015/16</i>	<i>2013 MTEF</i>
<b>Transport</b>	19.5%	7.3%	10.9%	12.0%	-4.3%	12.8%	4.8%	4.5%
<b>Human Settlements (including grants to provinces)</b>	21.5%	14.3%	-2.8%	19.2%	3.0%	2.6%	-0.6%	1.7%
<b>Cooperative Governance and Traditional Affairs (MIG)</b>	22.8%	38.0%	-14.2%	15.5%	-6.5%	-7.1%	-3.4%	-5.7%
<b>Basic Education</b>	22.8%	-19.7%	62.1%	37.8%	0.4%	13.5%	15.8%	9.9%
<b>Water Affairs</b>	50.0%	26.7%	24.5%	39.2%	<b>14.6%</b>	<b>23.7%</b>	<b>15.3%</b>	<b>17.8%</b>
<b>Health</b>	72.9%	22.3%	25.4%	-9.8%	0.3%	2.5%	-4.6%	-0.6%

A full review of the 2013/14 Budget and estimates for infrastructure spending in the next three years, and the implications for the construction industry, is now available. Please contact CESA for more information.

### 3. CESA Survey: Background

A total of 125 questionnaires were returned via both the on-line and hard copy system. Of these 77 were used in the survey, having submitted returns for the last two consecutive surveys. The sample for the current survey represents a fee income of R2,4 bn, and 7 667 employees for the period July - December 2012.

The analysis of the questionnaires completed by active firms in the consulting engineering profession provides a proxy for current and expected working conditions for the profession, which can be measured on a regular basis.

**CESA welcomes commentary received** from firms and invites all members to actively participate in sending commentary on either the survey or conditions in the work place thereby increasing the relevance of these reports.

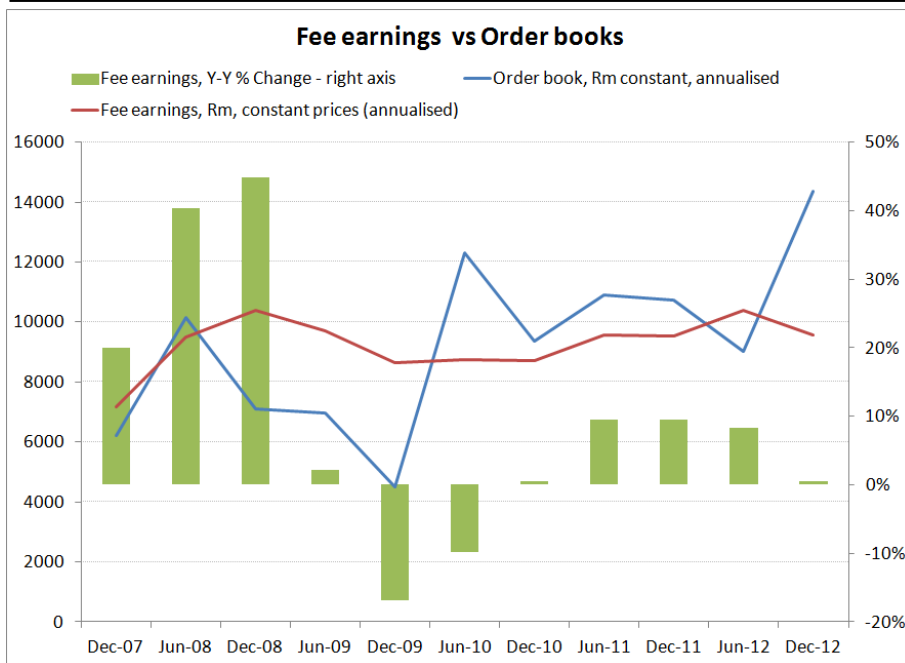
The survey is re-evaluated on a continuous basis, to ensure that the questions asked are pertinent and relevant to current conditions in the industry. Several new questions were included in the current survey to improve the compilation of benchmark indicators.

## 4. Prevailing conditions in the Consulting Engineering Industry

### 4.1 Financial Indicators

**Fee income earned was slower in the last six months of 2012 compared to the first six months**, down 5,5% in nominal terms, but this was still up 5,8% compared to the same period in 2011. Firms expected much better growth for the last six months of between 5% and 7%, but the deteriorating state of Orderbooks reported on in the June 2012 survey prevailed, negatively affecting earnings. Over 50% of the firms reported negative growth in the last six months. Fee income is expected to increase by around 7% in the first six months of 2013, perhaps more feasible, considering the outlook for order books has improved. Compared to June 2012, the value of secured work not yet invoiced has increased by 27% in nominal terms.

Total fee income as at December 2012 (annualised, current prices) is estimated to have increased to have moderated to R19,1 billion. Taking inflation into consideration, fee earnings are estimated to have increased only marginally, up 0,4% y/y in real terms, the slowest annual growth rate since 2009.



**Figure 3: Orderbook vs Fee earnings**

The average (un-weighted) **net profit** (before tax) deteriorated in the last six months averaging 11,4% compared 14,7% in the first six months. The average margin for firms employing more than 100 people was 6%, compared to between 10% and 16% for medium size firms, employing between 10 and 100 people. While most firms in recent surveys expected margins to come under pressure, most firms expected in this survey for margins to stabilize or increase. Majority of firms (61%) were satisfied with the profit margins also an improvement from previous surveys where most of the firms were dissatisfied.

Order books (the value of outstanding (not yet invoiced) for confirmed appointments, (excluding sub-consultants or JV partners) improved notably in the last six months, up 27% compared to first six months of 2012.

As a result, in relation to income, the order book : current income ratio improved to 1,5, from 0.87 in the June 2012 survey. A rate above 1.00 means the order book is higher than current income, which is a good for short term future earnings.

The industry's **return on working capital** (un-weighted average) improved to 46% from 40,8% (June 2012). Majority of firms reported a ROI of between 20% and 100%, with a few reporting negative rates.

*Return on investment is defined as the company's annual profit after interest and tax, as a percentage of Net Working Capital (current assets – current liabilities) during the last completed financial year. Working capital is considered part of operating capital as it affects the day to day operating liquidity. An increase in working capital indicates the business has either increased current assets (ie accounts receivable or inventory), or has decreased its current liabilities (accounts payable).*

**Approximately 8,3% of fee earnings were outstanding for longer than 90 days, compared to 9,4% in the June 2012 survey and 24% in December 2011.** This is the lowest rate since the December 2002 survey. This translates to an estimated R1,6bn outstanding in fee earnings. The “improvement” was mainly due to firms reporting less monies outstanding from foreign clients, down from 15% of fee earnings internationally to 8,3%. Unfortunately due to challenges experienced by firms to populate the questions related to outstanding fees by client, analysis of client's performance will no longer be available.

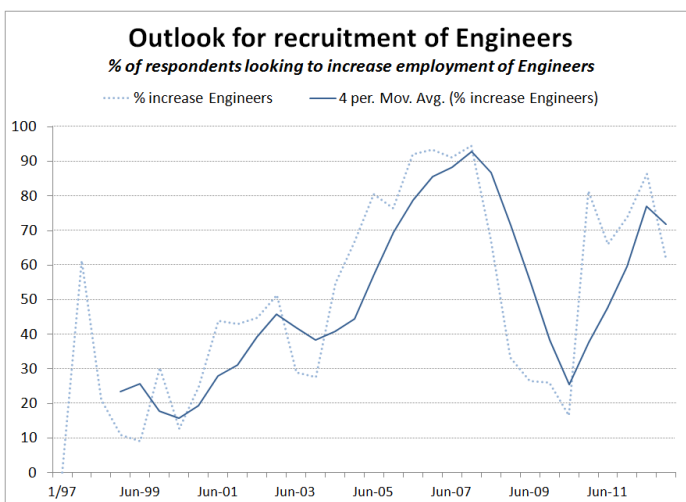
## 4.2 Human Resources

Employment decreased by an estimated 4% in the last six months of 2012, compared to a increase of 6% in the first six months. Compared to the same period in December 2011, employment was still marginally higher, up 1,7% to 19,694. Employment in the last six months was negatively affected by a reduction in administration and draughts persons. The strongest increases were reported in the employment of unregistered technicians. The employment of professional

Engineers increased by 7,5%, following an increase of 3,4% (June 2012) to an estimated 2 2900 employed in private consulting firms.

**Table 10**

Skill	Dec-12	Jun-12	% Change
Administration	4,675	5,888	-20.6%
Prof Eng	1,234	1,383	-10.8%
Unreg Technician	723	403	79.2%
Unreg Tech other	33	38	-12.9%
Unreg Eng	2,902	2,700	7.5%
Tech Assistant	676	623	8.6%
Draughts person	27	51	-47.7%
Unreg Technologist	1,430	1,207	18.5%
Prof Other	274	352	-22.3%
Lab Assistant	567	814	-30.3%
Technologist	1,993	2,787	-28.5%
Technician	2,199	1,511	45.6%
Prof Arch	2,429	2,085	16.5%
Prof QS	803	952	-15.7%
<b>Grand Total</b>	<b>19964</b>	<b>20796</b>	<b>-4.0%</b>



**Figure 4: Outlook for recruitment of Engineers**

The number of firms looking for engineers moderated to 61%, from 86,5% in June 2012

**Table 11: % of firms wanting to increase staff, by type of personnel**

Type of personnel	% of firms wanting to increase staff June 2010	% of firms wanting to increase staff December 2010	% of firms wanting to increase staff June 2011	% of firms wanting to increase staff December 2011	% of firms wanting to increase staff June 2012	% of firms wanting to increase staff December 2012
Engineers	16.6	81.5	66.0	74.0	86.5	61.2
Technologists	11.9	18.3	51.8	36.0	38.2	19.9
Technicians	1.7	18.3	52.7	22.0	22.2	18.1
Other technical staff	11.0	10.1	8.3	4.8	17.5	12.5
Support Staff	0.4	5.8	6.6	6.9	6.6	7.5

The employment of African (Black, Coloured and Asian) professional Engineers moderated in the last six months compared to the first six months, down 10,8%. This was accompanied by a 38% increase in the employment of African unregistered engineers. Trying to conform to BBBEE requirements, means demand for black engineers will continue to put pressure on firms, as there are simply not enough black engineers available to fill those positions. Private firms are now competing with growing demand from public sector companies for qualified engineers in view of government’s commitment to higher levels of infrastructure expenditure over the near to medium term.

In spite of a marginal decrease in employment, the salary and wage bill averaged a higher 66% of fee earnings (compared to 59% in June 2012). Inflated to annualised rates, the salary and wage bill increased by 10,8% in nominal terms since the December 2011 survey, to an estimated R12,6 billion, up from R11,3 bn in the December 2011 survey. In real terms, (deflated by the CPI), the salary and wage bill increased by 5% y/y (annualized) in December 2012.

On average, between 16% and 20% of firms’ total fee income earned were outsourced to external enterprises or individuals, including sub-consultants, joint venture and contract workers. This amounted to between R1 billion and R2 billion (annualised) in constant rand terms (2000 prices), or around R3bn in current prices. Larger firms (employing more than 100 people) by comparison to the industry average, outsourced a higher percentage of turnover (by between 22% and 25%). There appears to be a tendency amongst firms (particularly larger firms) to lower their levels of outsourcing, having to better utilize internal capacity.

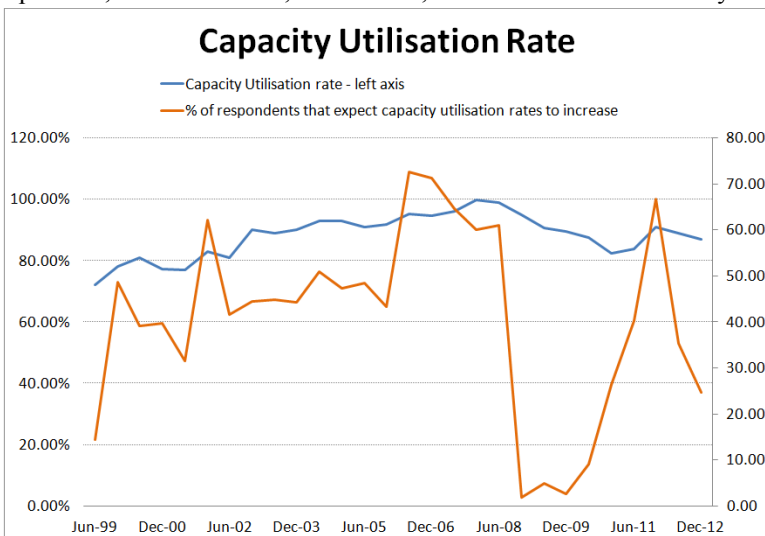
### 4.3 Training

Training expenses, which include the costs directly associated with training as well as the cost of salaries but excluding the 1% CETA skills development levy, averaged 19,7% of the total estimated salary bill, compared to 17,6% in the June 2012 survey. This data is not entirely reliable, as many firms did not complete this section of the questionnaire. Most of the firms reported only on direct training costs. Direct training costs, an easier measurement of firms contribution to training, averaged 0,5% of the salary and wage bill, compared to 1,2% in June 2012 and 1,9% in the December 2011 survey. 69% of the firms that responded to the survey spent less than 1% of their salary and wage bill on direct training costs, compared to 56% in the June 2011 survey.

Firms spent less on bursaries, in relation to the growing salary and wage bill. Bursaries are important to improve productivity in the industry, as well as to secure future employment opportunities. The industry spent on average 0,4% of the salary and wage bill on bursaries, compared to 0,8% in the June 2012 survey, and is on par with spending during the same period in 2011.

### 4.4 Industry Equity / Ownership Profile

Black (including Black, Asian and Coloured) equity, including executive directors, non-executive directors, members and partners, increased to 28,1% from 27,8% in the June 2012 survey. This means that there is a positive improvement in the contribution of black people that have obtained some sort of ownership or equity in the firm they work for, but they are still in the minority. For a detailed breakdown by race and gender please refer to tables 27 and 31.



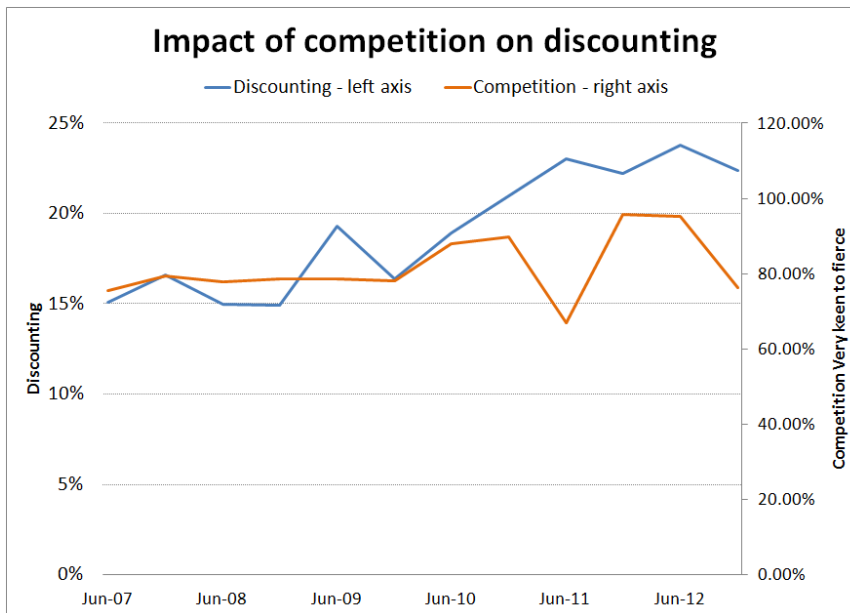
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### 4.5 Capacity Utilisation

Capacity levels dipped further in the last six months of 2012, from 89,1% in the June 2012 survey to an average of 87%. Fewer firms expect capacity utilisation to increase, from 35% in the previous survey to 24% in the current survey. Majority of firms (74%) expect capacity utilisation rates to remain the same in the next 6 months.



## 4.6 Competition in tendering



Competition in tendering generally eases during a time when the availability of work increases and intensifies during periods of work shortages. An easing of competition will generally lead to an increase in prices, while price inflation is capped during periods of work shortages due to the fact that an increasing number of firms tender on the same project. The tendering process is costly and time consuming, and higher levels of competition significantly increases the risk for the engineering firm.

Majority of firms said competition was keen to fierce (76%), slightly more moderate compared with results from the previous two surveys. Discounting increased to an average of 23,8% in June 2012, in line with tougher working conditions, but has softened somewhat,

albeit marginally, to 22,3% on average during the last six months of 2012. Larger firms discounted more aggressively, averaging between 25% and 30%, while smaller firms (employing less than 10 people) discounted by a lower average rate of between 10% and 15%.

## 4.7 Pricing

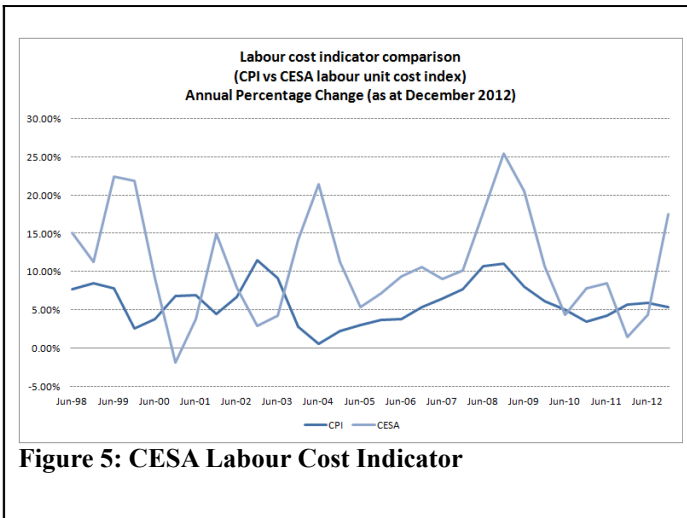
*No specific escalation index is available for the consulting engineering industry. After exploring many different avenues it was proposed to calculate a CESA Cost index that is based on a “labour unit cost” and extracted directly from the CESA MIS Survey. This should accommodate at least 50% of the firms’ costs and should therefore, in theory, be a reliable indicator of escalation. The CPI is currently used to deflate all financial information, until such time CESA officially applies the CESA Labour cost index as an industry price deflator.*

*The index is based on the sample of total number of employees versus the salaries and wages paid during the period under review*

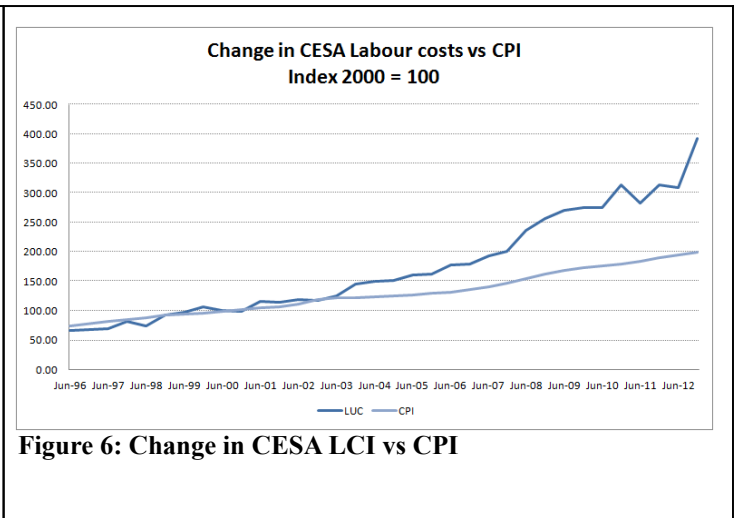
According to CESA’s labour cost indicator, the average unit cost of labour for the industry, increased by 5% in 2011, following an increase of 8,5% in the first half and 1,5% increase in the second half of 2011. Labour costs increased by 4,4% during the first half of 2012, but accelerated by 17% in the last six months of 2012, resulting in an annual average increase of 10,9% in 2012. The impact of higher salaries and wages is profound on the engineering business considering that between 55% and 65% of earnings are paid towards the salary and wage bill.

While changes in the general cost of living (as measured by the Statistics South Africa’s Consumer Price Index) are clearly not indicative of labour cost changes in the consulting engineering industry, the CPI may have a strong influence in the determination of ECSA Fees, which has shown an average increase of 5,84% in the second half of 2012 and 5,9% in the first half of 2012. Consumer inflation is expected to increase by 5,7% in 2013 (although recent external price pressures may push the CPI closer to (or beyond) the upper 6% target), and between 5,5% and 5,7% in 2014. According to the BER CPI expectations survey, financial analysts have consistently revised inflationary expectations downward. Good news for the future outlook for lending rates, which was already lowered to 8,5% in July 2012, which could provide some stimulus for future private sector spending. Administered prices (those controlled by government) will however continue to put upward

pressure on the inflation, and increased by 12% on average for the first seven months of 2012, supported by mainly by electricity and higher fuel prices.



**Figure 5: CESA Labour Cost Indicator**



**Figure 6: Change in CESA LCI vs CPI**

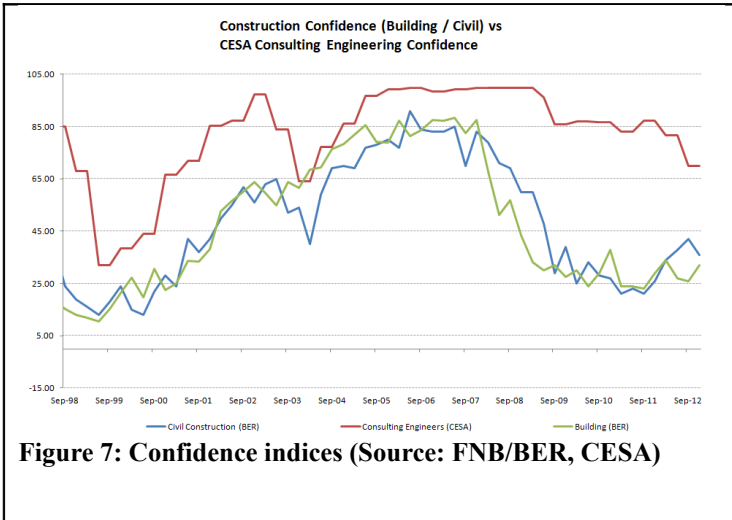
## 5. Industry Outlook

*The confidence index, as an indicator of members’ assessments regarding current and future prospects with regard to market developments, is a “weighted” index. The response of each company is weighted according to its total employment, including full and part time staff, and the index represents the net percentage of members satisfied with business conditions.<sup>1</sup> To ensure that possible distortions emanating from ad hoc replies do not occur, only those members that have submitted returns during the last two consecutive surveys are used. The confidence index is used as a leading indicator to determine a short to medium term outlook for the consulting engineering industry.*

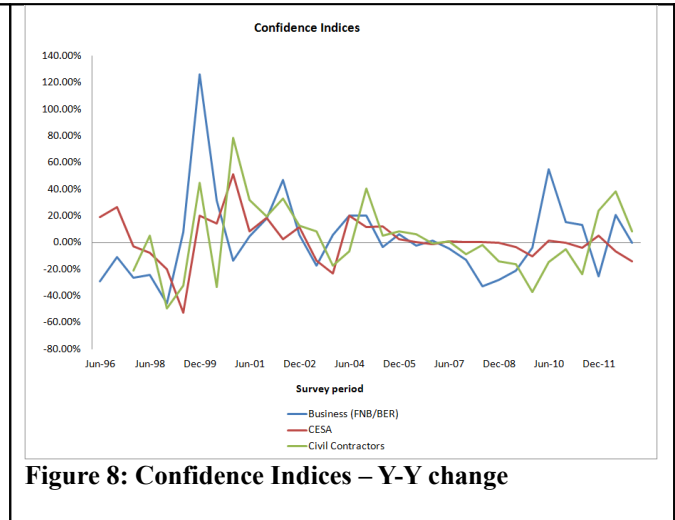
Conditions in the last six months of 2012 were more difficult than expected, especially with regards to earnings and work conditions affecting the larger firms, although most of the larger firms were quite busy during the second half of 2012. It just didn’t materialize into the expected earnings. Overall confidence in the industry fell by 14% since the first six months of 2012, from an index level of 81,8 to 70,0 (the lowest level since the second half of 2003. Confidence was severely dented by 2012, as expectations simply had not materialized. Expectations are for conditions to improve in the next 12 months, but more so in the second half of 2013 when confidence levels in respect of working conditions are restored to a level of 82,1.

While larger firms are more optimistic regarding the next 12 months, is more about being “satisfactorily busy” than very busy. Medium to smaller size firms are generally not as optimistic compared to the larger firms, but also expect some improvement in the next 12 months.

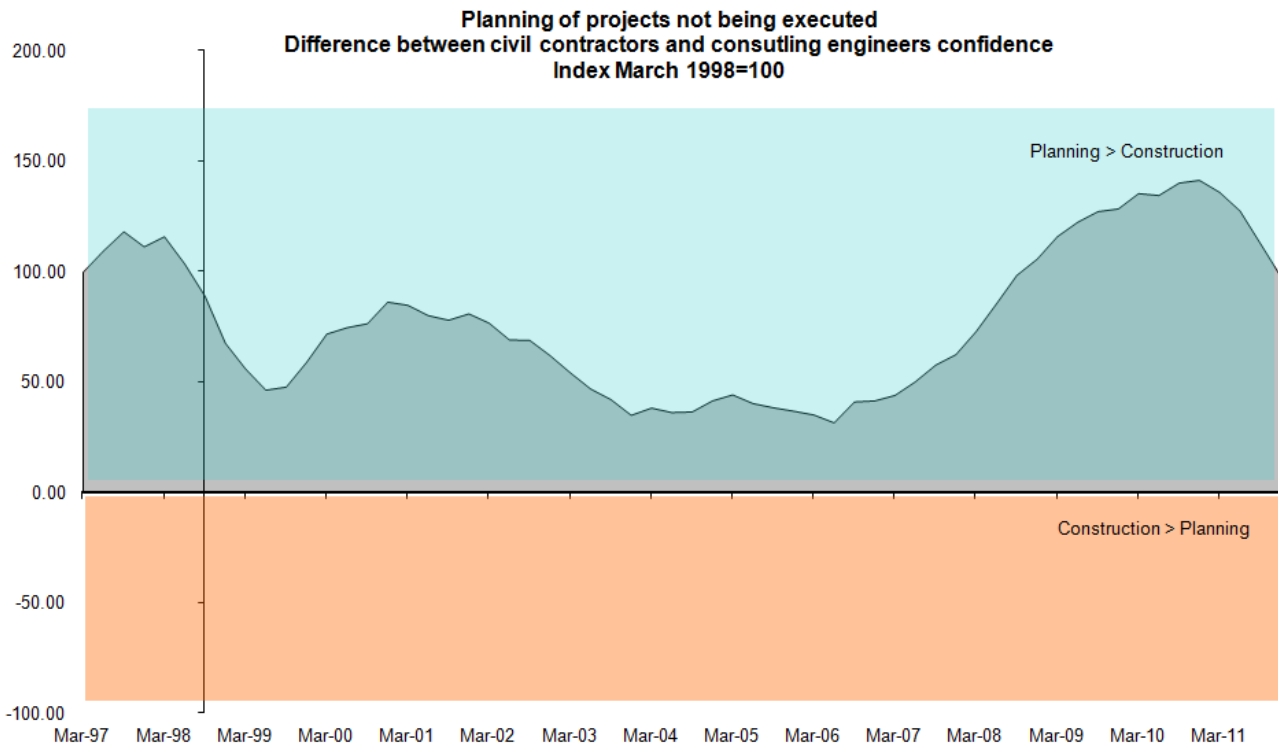
<sup>1</sup> The net percentage reflects only those members that expect conditions to be satisfactory, quite busy or very busy.



**Figure 7: Confidence indices (Source: FNB/BER, CESA)**



**Figure 8: Confidence Indices – Y-Y change**



**Figure 9: Planning of projects and execution**

The relationship between confidence levels of engineers and civil contractors deteriorated from 2009 onwards, as consulting engineers seem to remain busy, while work opportunities for civil construction deteriorated, or otherwise put, could not keep up with the pace experienced during the pre-2010 World cup preparation phase. That relationship is showing some signs of improvement, as contractors reported slightly improved confidence levels, unfortunately combined with deterioration in opinions expressed by consulting engineers.

Confidence in the consulting engineering sector generally lags business sentiment. Business sentiment just can't seem to break through the 50 index level ceiling, maintaining a level of between 40 and 47, insufficient to encourage or stimulate private sector investment. According to the BER's business confidence index, sentiment fell from a level of 52 in the first quarter of 2012 to 46 by the end of 2012, mainly due to growing concerns over the global economy the widespread



downward revision of South Africa's growth outlook, and violent strikes alongside growing social tension caused by poor delivery. Project postponements and delays in project implementation affected confidence in the contracting fraternity. Civil contracting confidence (based on the BER surveys) improved marginally to 42 in the 3<sup>rd</sup> quarter of 2012, before falling back to 36 by the end of 2012.

Confidence levels amongst building contractors showed no real improvement over the last year, although it did increase marginally to a level of 32 in the 4<sup>th</sup> quarter of 2012. This still means that an overwhelming majority of contractors are pessimistic regarding the outlook for work opportunities in the sector. The contracting industry is gripped in a "flat line" stripped from any evidence of a sustainable recovery or upward cycle. Indicators across the board are doing no more than fluctuating sideways. This trend is likely to continue until such time that the economy can provide sufficient stimulus to promote infrastructure expenditure. Infrastructure spending by government is capped by available funds, currently being eroded by poor economic growth, limiting revenue collection. Private sector spending is being hampered by affordability constraints (linked to financial institutions new policies in terms of mortgage finances requiring excessive deposits) as well as high vacancy rates due to an oversupply of commercial buildings during the retail and property boom.

**Table 12: CESA Confidence index: % respondents satisfied with working conditions**

Survey Period	CESA Confidence Index	% Change on previous survey	% Change on survey same time last year
Jun-05	96.8	12.2%	25.4%
Dec-05	99.3	2.5%	14.9%
Jun-06	99.7	0.5%	3.0%
Dec-06	98.4	-1.30	-0.8
Jun-07	99.4	1.0%	-0.3%
Dec-07	99.8	0.4%	1.4%
Jun-08	99.9	0.1%	0.5%
Dec-08	99.8	-0.1%	0.0%
Jun-09	96.2	-3.6%	-3.7%
Dec-09	86.0	-10.6%	-13.8%
Jun-10	87.1	1.3%	-9.4%
Dec-10	86.7	-0.5%	0.8%
Jun-11	83.2	-4.0%	-4.5%
Dec-11	87.4	5.0%	0.8%
Jun-12	81.8	-6.4%	-1.7%
<b>Dec-12</b>	<b>70.0</b>	<b>-14.4%</b>	<b>-19.9%</b>
Jun-13 (forecast)	76.8	9.7%	-6.1%
Dec-13 (forecast)	82.1	6.8%	17.2%

## 6. Industry challenges as noted by respondents

Many of the challenges were noted before but as they are still applicable are included again in this report.

- Fraud and corruption is affecting the ethos of our society, with a lot of talk and little action accompanying the growing evidence of corruption. CESA established an R1m anticorruption fund in order to take to take legal action against municipalities and private companies that it suspects of having acted illegally in the award or securing of contracts.
- Unlocking greater private sector participation is seen as a critical element to fast track delivery which will support engineering fees and as such engineering development in the industry. Private sector participation in this context refers to involvement on a more technical level (and not as a client), to improve municipal capacity and efficiency.
- Service delivery, especially at municipal level remains a critical burning issue. The consulting engineering industry is threatened by incapacitated local and provincial governments. As major clients to the industry, it is important that these institutions become more effective, more proactive in identifying needs and priorities and more efficient in project implementation and – management. Pravin Gordhan made it very clear that under spending of infrastructure budgets is a serious concern for the industry, where only R177bn of the R266bn was spent during 2010/11.
- The involvement of non-CESA members in government tenders and procurement continues to threaten the standard and performance of the industry, and was again raised by several members in the December 2011 survey. Non-Cesa members do not seem to comply with the same standards and principles as those firms that are members of CESA. Whether this is linked to complaints of “below cost” tendering during 2009, is not certain, but CESA members should be better informed about engaging in below cost tendering.
- Firms from across South African borders are tendering at rates that are not competitive for local firms. Complaints have been received of some of these firms not producing proper drawings and not attending site visits. Clients, unfortunately, are not always properly experienced or educated to conduct proper procurement assessments and unknowingly award contracts to these “unscrupulous” firms. While these occurrences may be limited to smaller rural areas, it remains an unacceptable practice.
- Lack of attention to maintain infrastructure poses a serious problem to the industry. Not only is it much more costly to build new infrastructure, but dilapidated infrastructure hampers economic growth potential. The cost of resurfacing a road after seven years at current prices, is estimated at R175 000 per kilometre, compared to R3 million per kilometer to rebuild, less than 6% of the construction price. In many cases, infrastructure is left to deteriorate to such a state, that maintenance becomes almost impossible.

- A further challenge to the industry is to find a way to standardize the procurement procedures applied by the different government departments. Procurement procedures should be standard for the country, or at least for the specific tier of government.
- Adapting to a low growth environment as outlook for infrastructure spending is hampered by poor economic growth, lower than expected revenue by government, international economic instability and price volatility, and low private sector confidence.

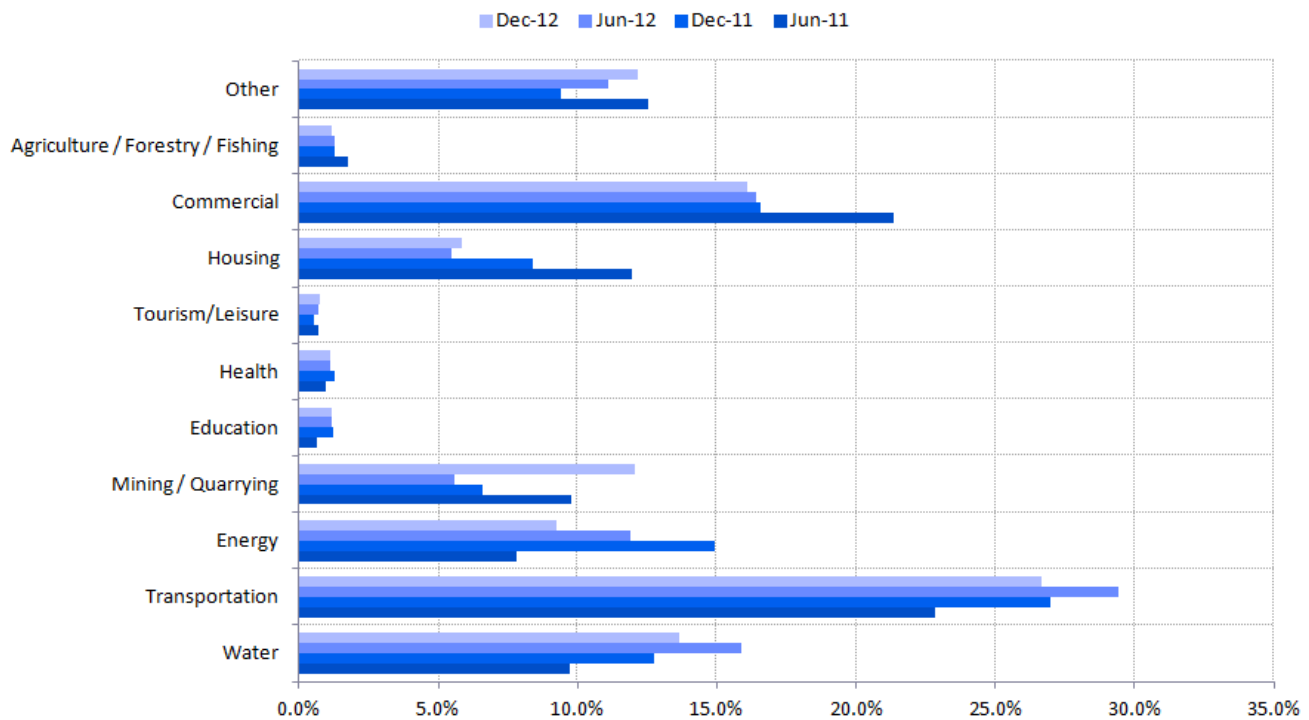
## 7. Market Profile

### 7.1 Sub-disciplines of fee income earned

The South African consulting engineering industry is represented by many different sub-disciplines. The most common disciplines within larger firms include civil, structural services and project management. Within the smaller and micro firms, electrical services and mechanical building services had the largest impact on earnings. Project Management is a fast growing discipline in the industry, contributing an average of 16,8% and 17,5% of fee earnings in the last two surveys, the highest levels since the inception of the survey.

Details of the various sub-disciplines are provided for under Statistical Tables.

### 7.2 Economic Sectors



**Figure 10: Fee earnings by Economic Sector**

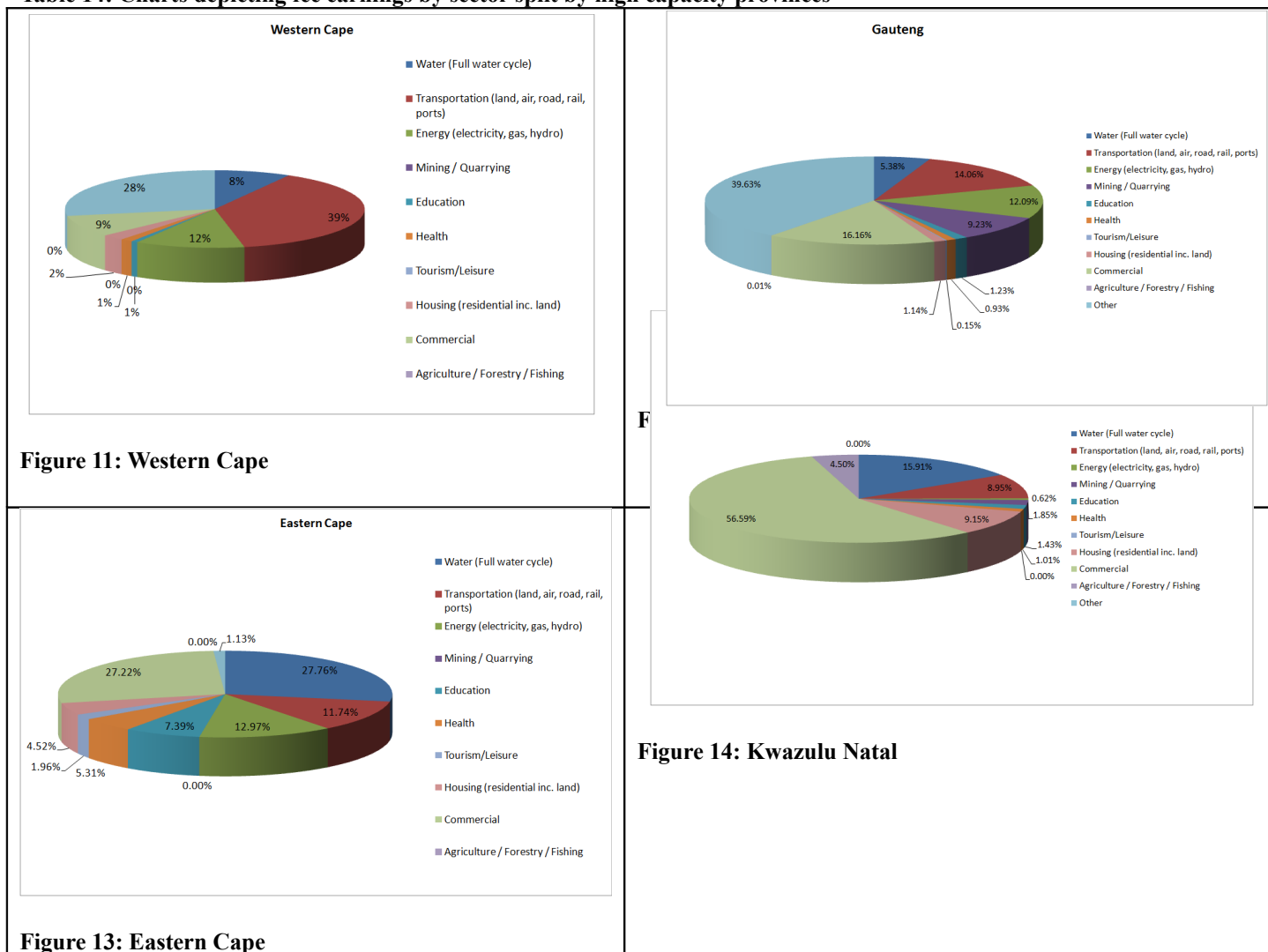
The economic sectors include all infrastructure associated within that sector including expenditure related to soft issues such as feasibility studies or environmental assessments. From this, three key sectors evolved namely water services, transportation and commercial, with a growing emphasis on housing.

The two most prominent sectors are Transportation (averaging 26,7% in 2012 compared to 24,9% for 2011) and Commercial (averaging 16,1% for 2012, from 18,9% in 2011). Greater focus was also on mining and quarrying, contributing 12% of fee earnings on average during 2012 (compared to 8% in 2011), as well as on water and transport.

**Table 13: Distribution of fee earnings by economic sector, by firm size**

	Water	Transportation	Energy	Mining	Education	Health	Tourism	Housing	Commercial	Agriculture	Eco other	Total
Large	10.6%	26.2%	7.4%	10.0%	1.0%	1.0%	1.0%	7.2%	17.7%	1.2%	16.5%	100.0%
Medium	13.2%	16.7%	2.2%	48.8%	1.8%	1.1%	0.1%	3.3%	8.9%	0.1%	3.8%	100.0%
Small	16.4%	24.3%	10.8%	2.3%	1.8%	6.5%	0.0%	1.3%	25.8%	4.8%	6.0%	100.0%
Micro	14.3%	22.2%	27.1%	0.5%	3.1%	1.5%	1.0%	3.9%	5.8%	4.6%	16.1%	100.0%
Total	11.4%	24.0%	6.6%	18.5%	1.2%	1.2%	0.8%	6.1%	15.8%	1.1%	13.4%	100.0%

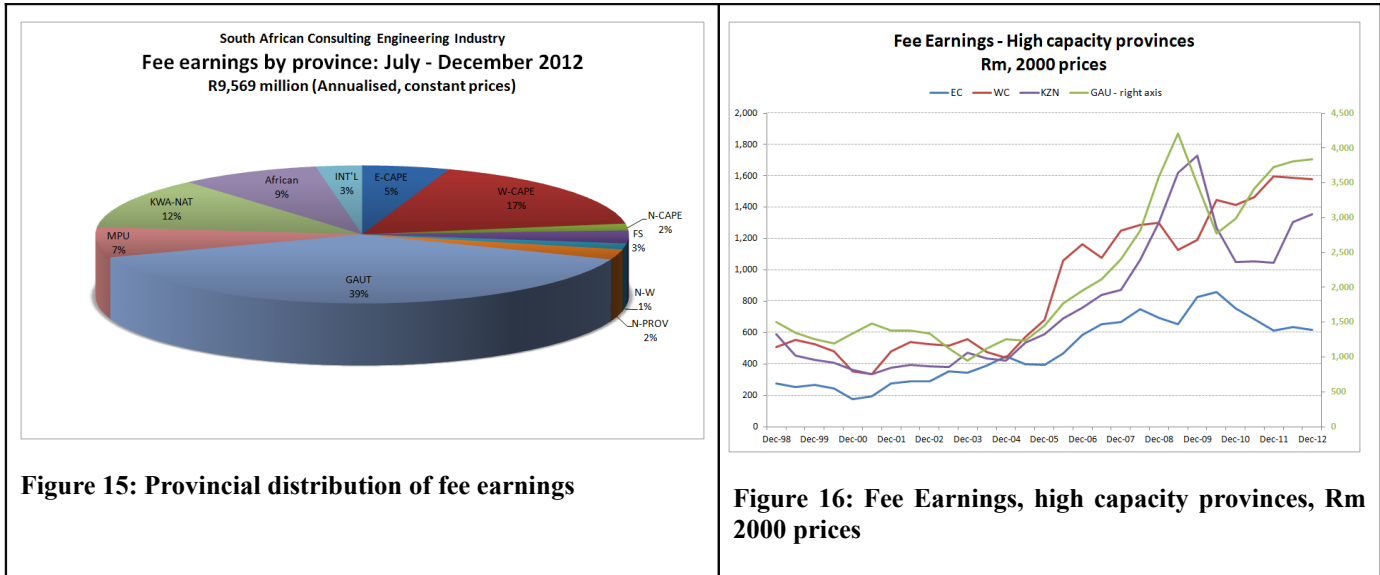
**Table 14: Charts depicting fee earnings by sector split by high capacity provinces**



Based on a provincial distribution of fee earnings - where earnings for a particular firm exceeded 50% within one specific province – the four charts above show the distribution within the high capacity provinces by economic sector in order to gauge some profile of activity at a provincial level. In the Eastern Cape for example earnings were dominated by energy

and water services, while commercial and transport contributed the highest earnings in Kwazulu Natal. In Gauteng energy contributed almost 25% to fee earnings, while earnings were most evenly spread in Western Cape.

### 7.3 Geographic Location



The bulk of fees were earned in Gauteng (39%), followed by 17% in the Western Cape and 12% in Kwazulu Natal. Fee earnings in Kwazulu Natal increased dramatically during 2009, contributing almost 19% of fee earnings, but this has slowed to a more “normal” level for the area, averaging between 10% and 12%. Kwazulu Natal is currently experiencing robust growth in particularly public sector spending where the value of public sector contracts awarded in the first six months has more than doubled in nominal terms. Kwazulu Natal and Mpumalanga experienced the strongest growth in real fee earnings over the last 12 months (comparing the last six months of 2012 with the same period in 2011), 29,8% and 31,6% respectively, while earnings fell in Northern Cape (down 14,7%) and North West (down 28,9%). Fee earnings increased just marginally in Gauteng up 3,2%, compared with earnings ending flat in Western Cape.

### 7.4 Clients

The contribution by the private sector recovered to 45% in the December 2012 survey, compared to a drop in the contribution by central government (from 8,1% in June 2012 to 2,8%), provincial government from 14,3% to 5,3% and state owned enterprises from 20,5% to 15,2%. The contribution by local government increased strongly during the last six months, to 31,2%, making it the second largest client to the consulting engineering industry.

**Table 15: Fee earnings distribution by client by firm size**

	<b>Central</b>	<b>Provincial</b>	<b>Local</b>	<b>Parastatals</b>	<b>Private</b>	<b>Total</b>
Large	2.01%	3.54%	32.01%	16.35%	46.09%	100.0%
Medium	6.70%	13.22%	27.36%	9.07%	43.65%	100.0%
Small	4.11%	10.11%	28.42%	12.17%	45.19%	100.0%
Micro	6.64%	13.36%	33.51%	18.42%	28.07%	100.0%
Total	2.84%	5.33%	31.22%	15.16%	45.46%	100.0%

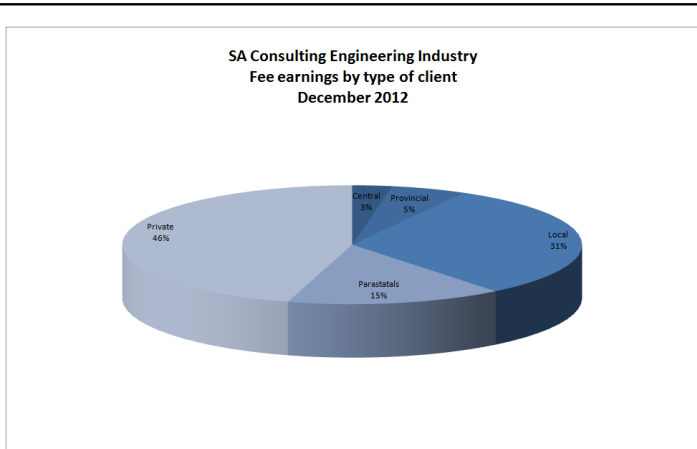


Figure 17: Fee earnings by client

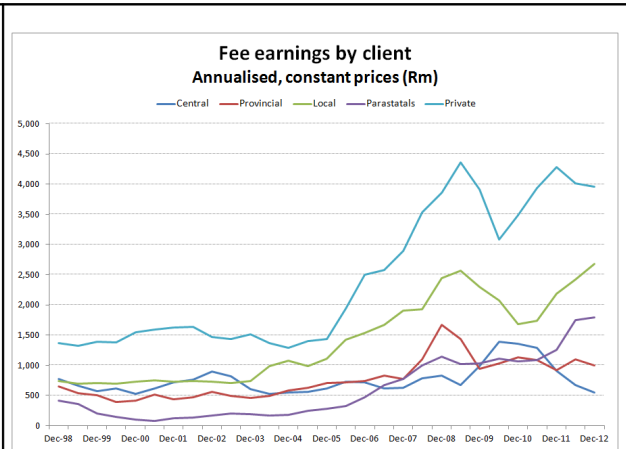


Figure 18: Fee earnings by client, annualized Rm, constant prices

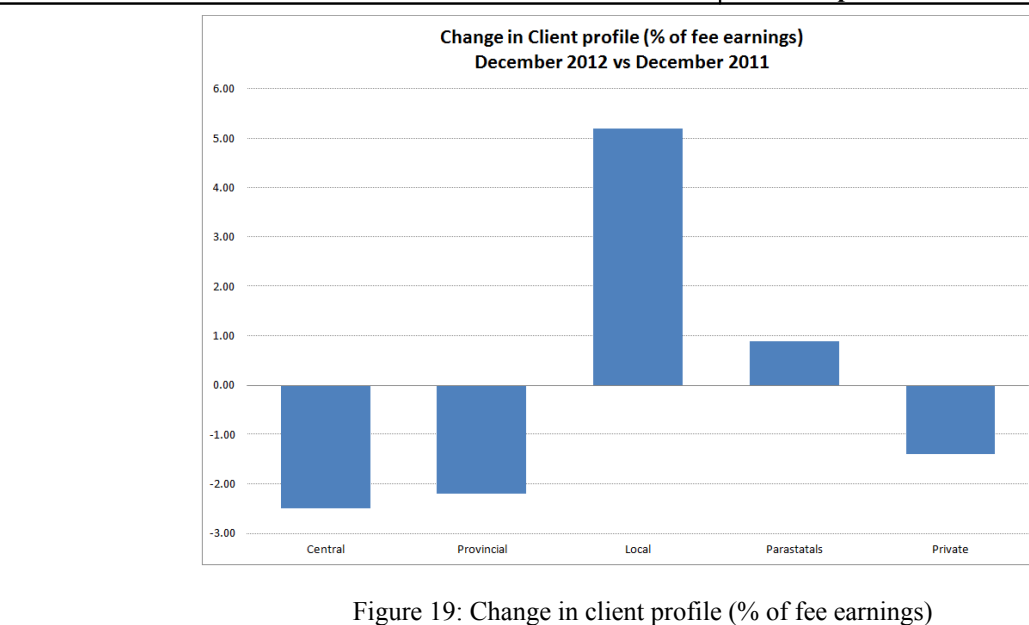


Figure 19: Change in client profile (% of fee earnings)

## 8. Professional Indemnity Insurance

The industry spends approximately R400 million on premiums for professional indemnity insurance, or roughly 1% of gross fee earnings. Majority of firms spend less than 1% of their income on insurance, but a few did report as high as 4%. For the purpose of this report, firms reporting a premium higher than 20% were removed. Most of the larger firms reported a level of between 1% and 1,5%.

Majority of firms (78%) reported a low risk exposure, while only 1% respondents reported to have a high risk exposure (compared to 3,5% and 2,2% in the December 2011 and June 2011 surveys).

Only a few firms reported on the value of claims paid by insurers as a percentage of premiums paid, so the results from this section of the survey is deemed unreliable and not suitable for analytical purposes. 25% of firms that responded to the survey, reported claims over the last five years, averaging 2,2 claims per firm. Based on the responses received, majority of firms (75%) had not notified the insurers of any claims.

On average (based on limited responses), of the 59 claims reported by participating firms, 8 were not refunded, representing 14,8% of the total number of claims notified.

The industry's average limit of indemnity as a percentage of gross fee income over the 12 month period increased substantially compared to previous surveys, mainly due to participation of larger firms that affected the average. The limit of indemnity averaged between 40% and 50% for larger firms, and a weighted average of 17% compared to a revised 21% in the December 2011 survey. Less than 20% of the firms reported an indemnity limit of 100% or more, majority reported between 20% and 80%. The industry average in terms of deductibles as a percentage of the indemnity limit fell moderated to 3,4% from 4,1% in the December 2011 survey. Larger firms averaged between 3% and 25%.

## 9. Quality Management System

A quality management system (QMS) is a control that is implemented at various stages of production process or service delivery stages. A QMS system is important for all firms, big and small. Majority of firms have a QMS system in place (91%).

Having a QMS in place is now compulsory for all CESA members, who recognize the importance of good efficient quality control. CESA recommends the ISO:9001:2008 frame work, recognizing this framework as being comprehensive and internationally recognized.

Members can, provided the correct procedures are followed, claim a portion of the skills development levy for quality management training. For more information on statutory requirements for members, please refer to the practice note released by CESA.

Members are obliged to use accredited agents should they wish to obtain an ISO 9001:2008 certificate. Details of certification bodies used by Members consenting to make this information available, is published on the CESA website. On average 40% of the firms complied, compared to 47% in June 2011. Majority of the small to micro firms are not ISO 9001:2008 certified, compared to 89% of the larger firms (employing more than 100 people) that are certified.



# Statistical Tables

**Table 16: General financial indicators**

Survey period	Employment <sup>2</sup>	Salaries / Wages 2000 prices (Annualised)	Fee Income, R mill (Annualised)			Cost Deflator	
			Current prices	Constant 2000 prices	Y/Y real % change	CPI Index 2000 = 100	CPI y/y % Change
Jun-04	12,791	1,870	4,511	3,666	2.0%	123.0	0.6%
Dec-04	12,599	1,957	4,601	3,692	7.8%	124.6	2.2%
Jun-05	12,798	2,030	5,015	3,957	7.9%	126.8	3.0%
Dec-05	14,026	2,247	5,597	4,330	17.3%	129.3	3.7%
Jun-06	14,068	3,096	7,835	5,954	50.5%	131.6	3.8%
Dec-06	14,912	3,350	8,149	5,983	38.2%	136.2	5.4%
Jun-07	15,807	3,613	9,493	6,771	13.7%	140.2	6.5%
Dec-07	16,755	3,542	10,537	7,183	20.1%	146.7	7.7%
Jun-08	18,347	4,940	14,752	9,499	40.3%	155.3	10.8%
Dec-08	19,081	5,516	16,965	10,407	44.9%	163.0	11.1%
Jun-09	19,596	5,141	16,287	9,700	2.1%	167.9	8.1%
Dec-09	19,342	5,019	14,984	8,653	-16.9%	173.2	6.2%
Jun-10	19,632	4,723	15,433	8,746	-9.8%	176.5	5.1%
Dec-10	19,357	5,220	15,588	8,699	0.5%	179.2	3.5%
Jun-11	19,937	5,650	17,614	9,576	9.5%	183.9	4.2%
Dec-11	19,618	6,002	18,054	9,527	9.5%	189.5	5.8%
Jun-12	20,796	6,124	20,221	10,380	8.4%	194.8	5.9%
Dec-12	19,964	6,316	19,109	9,569	0.4%	199.7	5.4%

**Table 17: Consulting Engineering Profession: Financial indicators: Annual Percentage Change (Real)**

Survey period	Employment	Salaries and Wage Bill	Fee income	Cost escalation based on CPI index (Stats Sa)
Jun-04	-2.1%	8.4%	2.0%	0.6%
Dec-04	0.5%	14.2%	7.8%	2.2%
Jun-05 *	0.0%	8.6%	7.9%	3.0%
Dec-05	11.3	14.8%	17.3%	3.7%
Jun-06	9.9%	52.5%	50.5%	3.8%
Dec-06	6.3%	49.1%	38.2%	5.4%
Jun-07	12.3%	16.7%	13.7%	6.5%
Dec-07	12.3%	5.7%	20.1%	7.7%
Jun-08	16.1%	36.7%	40.3%	10.8%
Dec-08	13.8%	54.1%	44.9%	11.1%
Jun-09	6.8%	53.0%	2.1%	8.1%
Dec-09	1.4%	58.0%	-16.9%	6.2%
Jun-10	0.2%	54.0%	-9.8%	5.1%
Dec-10	0.1%	60.0%	0.5%	3.5%
Jun-11	1.6%	59.0%	9.5%	4.2%
Dec-11	1.4%	63.0%	9.5%	5.8%
Jun-12	4.3%	60.0%	8.4%	5.9%
Dec-12	1.8%	66.0%	0.4%	5.4%

\* Revised

<sup>2</sup> Revised June 2007

**Table 18: Sub-disciplines: December 2011 – December 2012, Percentage share**

Sub-discipline	Dec-11	Jun-12	Dec-12	Change in market share Last 6 months	Change in market share Last 12 months
<b>Agricultural</b>	0.8%	0.55%	0.5%	-0.1%	-0.3%
<b>Architecture</b>	0.2%	0.31%	0.9%	0.5%	0.7%
<b>Mechanical building Services</b>	3.4%	2.45%	4.1%	1.7%	0.7%
<b>Civil</b>	<b>40.1%</b>	<b>41.60%</b>	49.2%	7.6%	9.1%
<b>Electrical / Electronic</b>	6.5%	7.60%	8.6%	1.0%	2.1%
<b>Environmental</b>	1.4%	2.33%	1.2%	-1.1%	-0.2%
<b>Facilities Management (New)</b>	1.5%	1.50%	0.0%	-1.5%	-1.5%
<b>Geotechnical</b>	0.9%	0.96%	0.9%	-0.1%	0.0%
<b>Industrial Process / Chemical</b>	1.4%	0.74%	1.4%	0.7%	0.0%
<b>GIS</b>	0.8%	1.00%	0.2%	-0.8%	-0.6%
<b>Hydraulics (New)</b>	0.7%	0.60%	0.4%	-0.2%	-0.3%
<b>Information Systems / Technology</b>	0.9%	0.54%	0.0%	-0.5%	-0.9%
<b>Marine</b>	0.4%	0.85%	0.0%	-0.9%	-0.4%
<b>Mechanical</b>	4.1%	3.32%	4.8%	1.5%	0.7%
<b>Mining</b>	4.1%	4.02%	5.5%	1.4%	1.4%
Project Management	16.8%	17.46%	9.0%	-8.5%	-7.8%
<b>Quantity Surveying</b>	0.3%	0.36%	0.2%	-0.1%	-0.1%
<b>Structural</b>	<b>15.3%</b>	<b>13.41%</b>	12.7%	-0.7%	-2.6%
<b>Town planning</b>	0.4%	0.36%	0.4%	0.0%	0.0%
<b>Total</b>	100.0%	100.0%	100.0%	0.0%	0.0%

**Table 19: Sub-disciplines: June 2011 – June 2012, Annualized R mill, 2000 prices**

Sub-discipline	Dec-11	Jun-12	Dec-12	Change Jun-12/Dec-11	Change Jun-12/Jan-11
Agricultural	R 76	R 57	R 48	-17.0%	-37.4%
Architecture	R 19	R 33	R 83	152.8%	333.3%
Mechanical building Services	R 324	R 254	R 395	55.4%	21.9%
Civil	R 3 820	R 4 318	R 4,708	9.0%	23.2%
Electrical / Electronic	R 619	R 789	R 823	4.3%	32.9%
Environmental	R 133	R 242	R 119	-50.7%	-10.5%
Facilities Management (New)	R 143	R 156	R 4	-97.4%	-97.2%
Geotechnical	R 86	R 100	R 83	-16.9%	-3.0%
Industrial Process / Chemical	R 133	R 77	R 134	74.5%	0.4%
GIS	R 76	R 104	R 22	-78.5%	-70.7%
Hydraulics (New)	R 67	R 62	R 40	-35.8%	-40.4%
Information Systems / Technology	R 86	R 56	R 1	-97.5%	-98.4%
Marine	R 38	R 89	R 0	-100.0%	-100.0%
Mechanical	R 391	R 344	R 457	32.7%	16.9%
Mining	R 391	R 417	R 522	25.3%	33.7%
Project Management	R 1 601	R 1 812	R 859	-52.6%	-46.3%
Quantity Surveying	R 29	R 38	R 22	-42.1%	-23.3%
Structural	R 1 458	R 1 392	R 1,214	-12.8%	-16.7%
Town planning	R 38	R 38	R 35	-7.8%	-8.6%
Total	R9 527	R10,380	R9,569	-7.8%	0.4%

**Table 20: Provincial Turnover, R mill, 2000 prices (Annualized)**

Province	Survey period							
	Jun-09	Dec-09	Jun-10	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12
EC	757	900	817	687	680	543	727	507
WC	912	1 471	1 425	1 400	1 532	1 658	1 516	1,646
NC	155	69	142	217	201	210	197	153
FS	213	260	405	426	354	343	467	287
NW	184	199	179	217	201	133	104	134
LIM	310	277	239	200	249	295	280	230
GAU	4 375	2 596	2 951	3 018	3 811	3 639	3 986	3,703
MPU	252	251	257	322	306	438	301	679
KZN	1 959	1 497	1 042	1 061	1 044	1 048	<b>1 567</b>	<b>1,148</b>
AFRICAN	378	926	1 079	948	1 006	1 058	1 007	813
INT'L	204	208	210	200	192	162	239	268
<b>Total</b>	<b>9 700</b>	<b>8 653</b>	<b>8 746</b>	<b>8 698</b>	<b>9 576</b>	<b>9 527</b>	<b>10 380</b>	<b>9,569</b>

**Table 21: Y-Y Change (Trend – Smoothed over two consecutive surveys, to remove short term volatility)**

Province	Survey period							
	Jun-09	Dec-09	Jun-10	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12
EC	-12.8%	19.4%	31.2%	-9.2%	-20.4%	-18.7%	-7.1%	0.9%
WC	-12.3%	-8.6%	28.5%	18.6%	1.3%	12.9%	8.2%	-0.9%
NC	-13.3%	-21.1%	-18.7%	60.0%	98.5%	14.4%	-2.8%	-14.7%
FS	-36.2%	-26.0%	43.5%	75.7%	17.5%	-16.1%	3.8%	8.1%
NW	-35.6%	-39.2%	-31.0%	3.5%	10.6%	-15.7%	-43.3%	-28.9%
LIM	33.7%	3.6%	-14.3%	-25.3%	-12.9%	24.0%	28.2%	-6.3%
GAU	49.7%	-2.7%	-34.1%	-14.4%	23.1%	24.8%	11.6%	3.2%
MPU	1.5%	-22.3%	-14.7%	15.1%	23.7%	28.6%	17.7%	31.6%
KZN	52.0%	32.9%	-21.6%	-39.1%	-17.1%	-0.6%	24.2%	29.8%
AFRICAN	25.3%	-43.7%	19.4%	55.4%	-2.6%	1.8%	5.7%	-11.8%
INT'L	24.1%	-61.7%	-43.9%	-0.3%	-6.2%	-13.8%	2.3%	43.3%
<b>Total</b>	<b>20.6%</b>	<b>-7.8%</b>	<b>-13.5%</b>	<b>-5.0%</b>	<b>5.0%</b>	<b>9.5%</b>	<b>9.0%</b>	<b>4.5%</b>

**Table 22: Market share (% of fee earnings)**

Province	Survey period							
	Jun-09	Dec-09	Jun-10	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12
EC	7.80	10.40	9.34	7.90	7.10	5.70	7.00	5.30
WC	9.40	17.00	16.29	16.10	16.00	17.40	14.60	17.20
NC	1.60	0.80	1.62	2.50	2.10	2.20	1.90	1.60
FS	2.20	3.00	4.63	4.90	3.70	3.60	4.50	3.00
NW	1.90	2.30	2.05	2.50	2.10	1.40	1.00	1.40
LIM	3.20	3.20	2.73	2.30	2.60	3.10	2.70	2.40
GAU	45.10	30.00	33.74	34.70	39.80	38.20	38.40	38.70
MPU	2.60	2.90	2.94	3.70	3.20	4.60	2.90	7.10
KZN	20.20	17.30	11.92	12.20	10.90	11.00	<b>15.10</b>	12.00
AFRICAN	3.90	10.70	12.34	10.90	10.50	11.10	9.70	8.50
INT'L	2.10	2.40	2.40	2.30	2.00	1.70	2.30	2.80
<b>Total</b>	100.0%	100.0%	100.0%	100.0%	100%	100%	100%	100%

**Table 23: Fee income earned by type of client, R mill, 2000 prices (Annualized)**

Client	Survey period						
	Dec-09	Jun-10	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12
Central	1 359	1 432	1 287	1 302	505	841	268
Provincial	857	1 217	1 044	1 130	715	1 484	507
Local	2 371	1 786	1 578	1 896	2 477	2 367	2,986
State Owned	1 108	1 110	1 018	1 159	1 362	2 128	1,455
Private	2 959	3 202	3 775	4 089	4 468	3 560	4,354
<b>Total</b>	8 653	8 746	8 702	9 576	9 527	10 380	9,569

**Table 24: Percentage market share by client**

Client	Survey period						
	Dec-09	Jun-10	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12
Central	15.7%	16.4%	14.8%	13.6%	5.3%	8.1%	2.8%
Provincial	9.9%	13.9%	12.0%	11.8%	7.5%	14.3%	5.3%
Local	27.4%	20.4%	18.1%	19.8%	26.0%	22.8%	31.2%
State Owned	12.8%	12.7%	11.7%	12.1%	14.3%	20.5%	15.2%
Private	34.2%	36.6%	43.4%	42.7%	46.9%	34.3%	45.5%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Table 25: Percentage of fee income earned by economic sector**

Economic sector	Jun-10	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12	Change in the last 6 months
Water (Full water cycle)	14.57%	14.0%	9.7%	12.8%	15.9%	11.4%	-4.5%
Transportation (land, air, road, rail, ports)	37.57%	32.5%	22.8%	27.0%	29.4%	24.0%	-5.4%
Energy (electricity, gas, hydro)	2.07%	3.4%	7.8%	14.9%	11.9%	6.6%	-5.3%
Mining / Quarrying	3.53%	8.3%	9.8%	6.6%	5.6%	18.5%	12.9%
Education	0.98%	0.5%	0.7%	1.3%	1.2%	1.2%	0.0%
Health	0.57%	0.4%	0.9%	1.3%	1.1%	1.2%	0.1%
Tourism/Leisure	0.05%	0.1%	0.7%	0.5%	0.7%	0.8%	0.1%
Housing (residential inc. land)	12.74%	16.8%	12.0%	8.4%	5.5%	6.1%	0.6%
Commercial <sup>3</sup>	22.03%	18.1%	21.3%	16.6%	16.4%	15.8%	-0.6%
Agriculture / Forestry / Fishing	2.65%	3.3%	1.8%	1.3%	1.3%	1.1%	-0.2%
Other	3.24%	2.6%	12.5%	9.4%	11.0%	13.4%	2.4%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100%</b>	<b>100%</b>	<b>-</b>

**Table 26: Fee income earned by economic sector, Constant 2000 prices, Annualized**

Economic sector	Jun-10	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12	Real % Change Dec-12/Dec-11
Water (Full water cycle)	1 275	1 214	931	1 216	1 650	1,090	-10.4%
Transportation (land, air, road, rail, ports)	3 286	2 825	2 187	2 569	3 052	2,293	-10.7%
Energy (electricity, gas, hydro)	181	297	747	1 423	1 235	628	-55.8%
Mining / Quarrying	308	721	934	629	581	1,768	180.9%
Education	86	46	63	119	125	114	-4.8%
Health	50	38	90	123	114	115	-7.2%
Tourism/Leisure	4	5	68	49	73	76	54.9%
Housing (residential inc. land)	1 114	1 460	1 145	797	571	588	-26.3%
Commercial	1 927	1 574	2 043	1 581	1 702	1,513	-4.3%
Agriculture / Forestry / Fishing	232	290	169	122	135	105	-13.5%
Other	283	230	1 199	898	1 142	1,280	42.5%
<b>Total</b>	<b>8 746</b>	<b>8 698</b>	<b>9 576</b>	<b>9 527</b>	<b>10 380</b>	<b>9,569</b>	<b>0.4%</b>

<sup>3</sup> Commercial includes: Manufacturing, industrial buildings, communication, financial, facilities management



**Table 27: Proposed CESA Labour unit cost index**

Survey period	Labour Unit cost (LUC) per hour	Index (2000 = 100) Smoothed	Year on Year percentage change in Index	Annual Average Annual Increase
Jun-98	R 46.93	77.63	15.2%	
Dec-98	R 59.30	83.65	11.4%	13.3%
Jun-99	R 61.46	95.10	22.5%	
Dec-99	R 68.01	101.96	21.9%	22.2%
Jun-00	R 63.90	103.88	9.2%	
Dec-00	R 63.08	100.00	-1.9%	3.7%
Jun-01	R 73.80	107.80	3.8%	
Dec-01	R 72.23	115.00	15.0%	9.4%
Jun-02	R75.56	116.39	8.0%	
Dec-02	R74.67	118.31	2.9%	5.4%
Jun-03	R79.51	121.42	4.3%	
Dec-03	R92.14	135.18	14.3%	9.3%
Jun-04 *	R95.22	147.56	21.5%	
Dec-04	R95.75	150.40	11.3%	16.4%
Jun-05	R101.62	155.44	5.3%	
Dec-05	R 103.07	161.20	7.2%	6.3%
Jun-06	R 112.97	170.14	9.5%	
Dec-06	R113.40	178.28	10.6%	10.0%
Jun-07	R122.3	185.61	9.1%	
Dec-07	R127,21	196.49	10.2%	9.7%
Jun-08	R150.43	218.65	17.8%	
Dec-08	R162.80	246.68	25.5%	21.7%
Jun-09	R171.98 r	263.65 r	20.6% r	
Dec-09	R174.77	273.07	10.7%	15.6%
Jun-10	R174.50	275.06	4.3%	
Dec-10	R199.3	294.37	7.8%	6.1%
Jun-11	R179.8	298.5	8.5%	
Dec-11	R199.5	298.7	1.5%	5.0%
Jun-12	R196.2	311.6	4.4%	
Dec-12	R249.8	351.2	17.6%	10.9%

SAACE LABOUR COSTS ESCALATION VS ECSA FEES

**Table 28: Fee income outstanding for more than 90 days (including foreign fee income earnings)**

Income distribution	Fee income outstanding for more than 90 days as % of total annualized fee income (total fee income = gross fee income + fee income outstanding)					Fee income outstanding longer than 90 days R mill, current prices
	Jul - Dec 2010 %	Jan-Jun 2011 %	July - Dec 2011 %	Jan - Jun 2012 %	Jul-Dec 2012 %	
Central government	2.6%	4%	7.1%	6.2%	6.4%	R35
Provincial government	8.8%	11.6%	12.2%	17.0%	9.5%	R97
Local government	7.8%	12.0%	14.6%	10.7%	7.0%	R418
State owned enterprises	5.5%	10.8%	3.6%	21.3%	8.5%	R248
Private Sector	9.6%	12.3%	12.9%	11.4%	5.5%	R483
Foreign (all EX-RSA)	47.7%	75.0%	62.0%	15.3%	8.3%	R305
<b>Total</b>	15.5%	18.0%	24.0%	9.4%	8.3%	R1 586

**\* Note:**

*In the July – December 2001 survey the questionnaire was changed to exclude non-payment for periods less than 60 days, which leads to distortions when comparing previous survey's results.*

*In the July – December 2002 survey the questionnaire was changed to include non-payments by foreign clients (irrespective of client classification). The total percentage of fee income outstanding therefore includes non-payments by foreign clients, previously excluded.*

**Table 29: Contribution to education and training (excluding 1% CETA Levy)**

Survey	Bursaries % of salary bill	Bursaries R mill current prices	Training % of Salary bill	Training R mill current prices
Jun-00	1,1%	R17	2,9%	R 44.5
Dec-00	0,6%	R10	2,1%	R 36.0
Jun-01	0,8%	R14	2,0%	R 36.6
Dec-01	0,5%	R9	1,5%	R 25.7
Jun-02	0,5%	R10	1,3%	R 25.7
Dec-02	0,9%	R19	0,7%	R 14.6
Jun-03	0,6%	R13	1,5%	R 31.7
Dec-03	0,5%	R11	1,3%	R 28.0
Jun-04	0,6%	R13	1,3%	R30.0
Dec-04	0,5%	R12	1,8%	R44.6
Jun-05	0,6%	R15	1,3%	R33.7
Dec-05	0,7%	R19	1,5%	R44.2
Jun-06	0,9%	R35	1,2%	R48.5
Dec-06	0,6%	R29	1,1%	R49.7
Jun-07	0,9%	R44	1,0%	R52.2
Dec-07	0,6%	R32	1,3%	R67.0
Jun-08	1.1%	R82	1.4%	R107.4
Dec-08	0.5%	R40	0.8%	R70.1
Jun-09	0.6%	R52	0.8%	R68.2
Dec-09	0.4%	R37	1.0%	R88.9
Jun-10	0.9%	R72	0.9%	R74.2
Dec-10	0.4%	R37	1.3%	R121.6
Jun-11	0.5%	R 53	0.3%	R31.2
Dec-11	0.3%	R34	1.9%	R212
Jun-12	0.8%	R95	1.2%	R148
Dec-12	0.4%	R50	0.5%	R63

**Table 30: Employment profile of the consulting engineering industry: Percentage contribution: July - December 2012**

Job Category	Black	Coloured	Asian	White	Total
Professional Engineer Pr.Eng	7.6%	3.3%	4.0%	85.2%	100.00%
Professional Architects	6.7%	0.0%	13.3%	80.0%	100.00%
Professional Quantity Surveyors	20.0%	0.0%	5.0%	75.0%	100.00%
Professional Other	10.7%	2.5%	8.2%	78.7%	100.00%
Technologists Pr TEchENg	9.1%	6.9%	4.4%	79.6%	100.00%
Technicians PrTechni	42.0%	6.5%	6.5%	44.9%	100.00%
Unregistered technical staff: Engineer	20.7%	2.9%	15.6%	60.8%	100.00%
Unregistered technical staff: Technologist	29.0%	8.6%	6.2%	56.3%	100.00%
Unregistered technical staff: Technician	45.7%	8.3%	5.1%	40.9%	100.00%
Unregistered technical staff: Other	32.4%	4.9%	9.6%	53.0%	100.00%
Technical Assistants	59.0%	5.9%	3.6%	31.5%	100.00%
Draughts Persons	13.7%	8.7%	8.1%	69.6%	100.00%
Laboratory / Survey Assistants	80.4%	8.2%	0.6%	10.8%	100.00%
Administration / Support staff	39.2%	11.4%	5.9%	43.6%	100.00%
Total	30.4%	7.2%	7.1%	55.3%	100.00%

**Table 31: Employment profile of the consulting engineering industry: Percentage contribution: July - December 2012 Change in contribution since December 2011 survey**

Job Category	Black	Coloured	Asian	White
Professional Engineer Pr.Eng	2.5%	0.4%	0.5%	-3.5%
Professional Architects	6.7%	0.0%	-1.0%	-5.7%
Professional Quantity Surveyors	-7.8%	0.0%	5.0%	2.8%
Professional Other	-1.9%	-1.6%	3.3%	0.2%
Technologists Pr TEchENg	3.8%	1.2%	0.1%	-5.1%
Technicians PrTechni	19.8%	-9.7%	4.0%	-14.0%
Unregistered technical staff: Engineer	1.7%	-0.9%	6.6%	-7.5%
Unregistered technical staff: Technologist	-0.2%	-1.0%	-2.8%	4.1%
Unregistered technical staff: Technician	1.4%	0.9%	0.2%	-2.5%
Unregistered technical staff: Other	6.1%	-1.5%	4.1%	-8.7%
Technical Assistants	12.6%	-3.1%	-0.3%	-9.2%
Draughts Persons	-0.4%	-2.2%	0.8%	1.7%
Laboratory / Survey Assistants	3.1%	0.8%	0.3%	-4.1%
Administration / Support staff	1.2%	-1.4%	-0.9%	1.2%
Total	2.0%	-0.8%	1.4%	-2.5%

**Table 32: Ownership / equity controlled by black people, as percentage of TOTAL Equity**  
(African include Black, Asian and Coloured)

Company Type	Owner category	Professional Category	Dec-09	Jun-10	Dec-10	Jun-11	Dec-11	Jun-12	Dec-12
<b>(PTY) LTD</b>	Executive Directors	Pr.Eng	14.9%	9.8%	9.6%	9.2%	11.2%	12.3%	13.7%
		PrTechEng	12.0%	50.0%	33.3%	26.7%	23.7%	33.3%	23.8%
		Other	40.4%	27.9%	26.2%	26.9%	45.9%	46.5%	60.5%
		<b>TOTAL</b>	<b>19.6%</b>	<b>15.5%</b>	<b>15.2%</b>	<b>15.3%</b>	<b>20.8%</b>	<b>19.7%</b>	<b>22.6%</b>
	Non-Executive Directors	Pr.Eng	100.0%	10.0%	7.1%	16.7%	100.0%	66.7%	50.0%
		PrTechEng	100.0%	50.0%	50.0%	-	50.0%	50.0%	100.0%
		Other	84.0%	65.6%	69.6%	82.4%	86.2%	89.0%	84.2%
		<b>TOTAL</b>	<b>88.0%</b>	<b>30.2%</b>	<b>35.8%</b>	<b>55.2%</b>	<b>85.7%</b>	<b>79.6%</b>	<b>75.0%</b>
	<b>CC</b>	Members	Pr.Eng	50.0%	41.7%	38.5%	33.3%	32.5%	36.7%
PrTechEng			60.0%	60.0%	60.0%	42.9%	35.7%	36.4%	40.0%
Other			50.0%	66.7%	50.0%	40%	55.6%	33.3%	85.7%
<b>TOTAL</b>		<b>51.8%</b>	<b>50.0%</b>	<b>45.4%</b>	<b>37.5%</b>	<b>36.5%</b>	<b>36.0%</b>	<b>62.5%</b>	
<b>Partnership</b>	Partners	Pr.Eng	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		PrTechEng	0.0%	0.0%	0.0%	66.7%	0.0%	0.0%	0.0%
		Other	0.0%	80.0%	75.0%	0.0%	50.0%	50.0%	50.0%
	<b>TOTAL</b>	<b>0.0%</b>	<b>15.4%</b>	<b>12.5%</b>	<b>22.2%</b>	<b>14.3%</b>	<b>20.0%</b>	<b>11.1%</b>	
<b>Total</b>		<b>28.0%</b>	<b>21.4%</b>	<b>20.4%</b>	<b>21.2%</b>	<b>27.8%</b>	<b>28.1%</b>	<b>30.2%</b>	

**Table 33: CESA Confidence index: % respondents satisfied with working conditions**

Survey Period	CESA Confidence Index	% Change on previous survey	% Change on survey same time last year
Dec-99	38.5	20.31%	-43.4%
Jun-00	44.0	14.29%	37.5%
Dec-00	66.5	51.05%	72.6%
Jun-01	71.9	8.23%	63.5%
Dec-01	85.4	18.67%	28.4%
Jun-02	87.3	2.24%	21.3%
Dec-02	97.2	11.34%	13.8%
Jun-03	83.8	-13.76%	-3.9%
Dec-03	64.2	-23.38%	-33.9%
Jun-04	77.2	20.25%	-7.9%
Dec-04	86.3	11.77%	34.4%
Jun-05	96.8	12.2%	25.4%
Dec-05	99.3	2.5%	14.9%
Jun-06	99.7	0.5%	3.0%
Dec-06	98.4	-1.30	-0.8
Jun-07	99.4	1.0%	-0.3%
Dec-07	99.8	0.4%	1.4%
Jun-08	99.9	0.1%	0.5%
Dec-08	99.8	-0.1%	0.0%
Jun-09	96.2	-3.61%	-3.7%
Dec-09	86.0	-10.6%	-13.8%
Jun-10	87.1	1.3%	-9.4%
Dec-10	86.7	-0.5%	0.8%
Jun-11	83.2	-4.0%	-4.5%
Dec-11	87.4	5.0%	0.8%
Jun-12	81.8	-6.4%	-1.7%
Dec-12	70.0	-14.4%	-19.9%
Jun-13 (forecast)	76.8	9.7%	-6.1%
Dec-13 (forecast)	82.1	6.8%	17.2%

**Table 34: Employment Breakdown, by race, gender and job category July - December 2012**

Job category	Black			Coloured			Asian			White			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Professional Engineer Pr.Eng	181	15	196	78	7	86	93	10	103	2,110	98	2,208	2,462	130	2,592
Professional Architects	2	0	2	0	0	0	5	0	5	27	2	29	34	2	37
Professional Quantity Surveyors	5	5	10	0	0	0	2	0	2	29	7	37	37	12	49
Professional Other	32	32	64	10	5	15	29	20	49	343	127	470	414	184	598
Technologists Pr TEchENg	59	12	71	44	10	54	32	2	34	598	25	622	733	49	782
Technicians PrTechni	113	29	142	15	7	22	15	7	22	145	7	152	287	51	338
Unregistered technical staff: Engineer	417	137	554	61	17	78	355	61	417	1,367	260	1,627	2,200	475	2,676
Unregistered technical staff: Technologist	201	64	265	51	27	78	37	20	56	475	39	515	764	149	914
Unregistered technical staff: Technician	671	243	914	123	44	167	81	22	103	752	66	818	1,627	375	2,002
Unregistered technical staff: Other	321	149	470	49	22	71	100	39	140	632	137	769	1,103	348	1,450
Technical Assistants	527	157	684	54	15	69	39	2	42	279	86	365	899	260	1,159
Draughts Persons	164	17	181	86	29	115	98	10	108	515	409	924	862	466	1,328
Laboratory / Survey Assistants	267	44	311	25	7	32	2	0	2	25	17	42	319	69	387
Administration / Support staff	782	1,433	2,215	172	470	642	108	223	331	461	2,004	2,465	1,522	4,131	5,652
<b>Total</b>	3,741	2,337	6,079	767	662	1,428	997	417	1,414	7,757	3,286	11,043	13,263	6,701	<b>19,964</b>
<b>% of total</b>	18.7%	11.7%	30.4%	3.8%	3.3%	7.2%	5.0%	2.1%	7.1%	38.9%	16.5%	55.3%	66.4%	33.6%	100.0%

**Table 35: Employment Breakdown, by race, gender and job category: July - December 2012: Percentage share**

Job category	Black			Coloured			Asian			White			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Professional Engineer Pr.Eng	0.9%	0.1%	1.0%	0.4%	0.0%	0.4%	0.5%	0.0%	0.5%	10.6%	0.5%	11.1%	12.3%	0.7%	13.0%
Professional Architects	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.2%	0.0%	0.2%
Professional Quantity Surveyors	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%	0.2%	0.1%	0.2%
Professional Other	0.2%	0.2%	0.3%	0.0%	0.0%	0.1%	0.1%	0.1%	0.2%	1.7%	0.6%	2.4%	2.1%	0.9%	3.0%
Technologists Pr TEchENG	0.3%	0.1%	0.4%	0.2%	0.0%	0.3%	0.2%	0.0%	0.2%	3.0%	0.1%	3.1%	3.7%	0.2%	3.9%
Technicians PrTechni	0.6%	0.1%	0.7%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.7%	0.0%	0.8%	1.4%	0.3%	1.7%
Unregistered technical staff: Engineer	2.1%	0.7%	2.8%	0.3%	0.1%	0.4%	1.8%	0.3%	2.1%	6.8%	1.3%	8.1%	11.0%	2.4%	13.4%
Unregistered technical staff: Technologist	1.0%	0.3%	1.3%	0.3%	0.1%	0.4%	0.2%	0.1%	0.3%	2.4%	0.2%	2.6%	3.8%	0.7%	4.6%
Unregistered technical staff: Technician	3.4%	1.2%	4.6%	0.6%	0.2%	0.8%	0.4%	0.1%	0.5%	3.8%	0.3%	4.1%	8.1%	1.9%	10.0%
Unregistered technical staff: Other	1.6%	0.7%	2.4%	0.2%	0.1%	0.4%	0.5%	0.2%	0.7%	3.2%	0.7%	3.9%	5.5%	1.7%	7.3%
Technical Assistants	2.6%	0.8%	3.4%	0.3%	0.1%	0.3%	0.2%	0.0%	0.2%	1.4%	0.4%	1.8%	4.5%	1.3%	5.8%
Draughts Persons	0.8%	0.1%	0.9%	0.4%	0.1%	0.6%	0.5%	0.0%	0.5%	2.6%	2.0%	4.6%	4.3%	2.3%	6.7%
Laboratory / Survey Assistants	1.3%	0.2%	1.6%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%	1.6%	0.3%	1.9%
Administration / Support staff	3.9%	7.2%	11.1%	0.9%	2.4%	3.2%	0.5%	1.1%	1.7%	2.3%	10.0%	12.3%	7.6%	20.7%	28.3%
<b>Total</b>	<b>18.7%</b>	<b>11.7%</b>	<b>30.4%</b>	<b>3.8%</b>	<b>3.3%</b>	<b>7.2%</b>	<b>5.0%</b>	<b>2.1%</b>	<b>7.1%</b>	<b>38.9%</b>	<b>16.5%</b>	<b>55.3%</b>	<b>66.4%</b>	<b>33.6%</b>	<b>100.0%</b>



**Table 36: Ownership profile: Employment, company type, race & gender: July - December 2012**

Comp any Type	Owner category	Professional			Black			Coloured			Asian			White			Total		
		Category	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total		
(PTY) LTD	Executive Director	PrEng	22	0	22	15	0	15	6	2	7	373	2	375	420	7	427		
		PrTechEng	7	0	7	7	0	7	7	2	9	49	0	49	71	2	73		
		Other	45	5	50	2	0	2	2	2	4	34	9	43	64	17	81		
	Non-Executive Director	PrEng	7	0	7	0	0	0	0	2	2	6	0	6	15	2	17		
		PrTechEng	2	0	2	0	0	0	0	0	0	6	0	6	11	0	11		
		Other	22	12	35	7	0	7	4	4	7	4	2	6	36	19	54		
CC	Member	PrEng	7	0	7	6	0	6	9	0	9	36	0	36	56	0	56		
		PrTechEng	7	0	7	0	0	0	2	0	2	9	4	13	17	4	21		
		Other	7	2	10	0	0	0	4	0	4	7	4	11	13	4	17		
Partnership	Partner	PrEng	0	0	0	0	0	0	0	0	0	4	0	4	4	0	4		
		PrTechEng	0	0	0	0	0	0	0	0	0	2	0	2	2	0	2		
		Other	0	0	0	2	0	2	0	0	0	6	0	2	7	0	4		
<b>GRAND TOTAL</b>			<b>129</b>	<b>20</b>	<b>149</b>	<b>39</b>	<b>0</b>	<b>39</b>	<b>34</b>	<b>11</b>	<b>45</b>	<b>534</b>	<b>21</b>	<b>551</b>	<b>715</b>	<b>54</b>	<b>766</b>		
<b>% distribution</b>			<b>16.9%</b>	<b>2.6%</b>	<b>19.5%</b>	<b>5.1%</b>	<b>0.0%</b>	<b>5.1%</b>	<b>4.4%</b>	<b>1.5%</b>	<b>5.9%</b>	<b>69.7%</b>	<b>2.7%</b>	<b>71.9%</b>	<b>93.4%</b>	<b>7.1%</b>	<b>100.0%</b>		
<b>% directorship only</b>			<b>12.9%</b>	<b>0.9%</b>	<b>13.7%</b>	<b>4.2%</b>	<b>0.0%</b>	<b>4.2%</b>	<b>2.6%</b>	<b>1.0%</b>	<b>3.5%</b>	<b>78.4%</b>	<b>1.9%</b>	<b>80.3%</b>	<b>95.5%</b>	<b>4.5%</b>	<b>100.0%</b>		
<b>Total employment</b>			<b>3,741</b>	<b>2,337</b>	<b>6,079</b>	<b>767</b>	<b>662</b>	<b>1,428</b>	<b>997</b>	<b>417</b>	<b>1,414</b>	<b>7,757</b>	<b>3,286</b>	<b>11,043</b>	<b>13,263</b>	<b>6,701</b>	<b>19,964</b>		
<b>% ownership / equity</b>			<b>3.5%</b>	<b>0.9%</b>	<b>2.5%</b>	<b>5.1%</b>	<b>0.0%</b>	<b>2.8%</b>	<b>3.4%</b>	<b>2.7%</b>	<b>3.2%</b>	<b>6.9%</b>	<b>0.6%</b>	<b>5.0%</b>	<b>5.4%</b>	<b>0.8%</b>	<b>3.8%</b>		

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**End of report**

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