



# **CESA YPF Western Cape**

# Young Professional's Survey 2012/2013





## BACKGROUND

# 2006/7 SURVEY

In 2006, the CESA YPF WC (founding branch) conducted a survey of Young Engineering Professionals (YP's):

- To determine what **issues** YP's in the industry were facing
- To determine, and later implement, measures to address these issues
- Defined the mandate for the YPF branch going forward





## BACKGROUND

# **GOLDEN THREAD ISSUES (2006)**

- Large age gap between junior and senior engineers
- Remuneration
- Recognition
- Mentorship





# SURVEY METHODOLOGY

## **STAGE 1: ONLINE SURVEY**

- October 2012
- Unbiased and anonymous
- Re-evaluating the old *Golden Thread Issues*
- Investigating issues that are **well-established**





# SURVEY METHODOLOGY

### **STAGE 2: DISCUSSION FORUMS**

- July 2013
- **Company based** discussions (headed by MYP's)
- Focusing on issues identified in the online survey
- Reinforcing **critical viewpoints** expressed in the online survey
- Remove **uncertainty** and **individual bias**
- Opening **discussions** around, and **informing** YP's of, the issues





#### DEMOGRAPHICS

- 174 respondents
- 210 registered YP's in the WC (registered with CESA)
- **300** YP's on the YPF WC distribution list





#### DEMOGRAPHICS

GENDER	%
Male	<b>79%</b>
Female	20%

ENGINEERING DISCIPLINE	%
Civil/Structural/ Geotechnical/Transport	76%
Electrical	9%
Marine/Coastal	6%
Environmental	4%
Mechanical/Mechatronics	3%
Industrial/Process	1%





#### DEMOGRAPHICS

QUALIFICATION	%	EXPERIENCE	%
BSc / BEng	<b>48%</b>		
N Dip	18%	0-3 years	38%
B Tech	18%	4.7	270/
MSc / MEng	11%	4-7 years	37%
Other	5%	8-12 years	20%
M Tech	0%		
PhD	0%	12-17 years	5%





#### **NEW GOLDEN THREAD ISSUES**

ISSUE/COMMENT OCCURENCE	%
Mentorship and Training	50%
Salary/Remuneration	37%
Career Development	32%
Tendering/Procurement	22%
Professional Registration	13%





#### **MENTORSHIP AND TRAINING**

- **50%** of YP's feel they are not receiving the **training** they require/desire
- Lack of structured training
- Lack of strong mentors
- Fast-track project mindset limiting training opportunities

ISSUE/COMMENT OCCURENCE	
Mentorship and Training	50%
Salary/Remuneration	37%
Career Development	32%
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Professional Registration	13%





#### REMUNERATION

- **50%** of YP's believe engineering professionals are not fairly remunerated
- 66% of YP's believe that remuneration for YP's is "Below Average" when compared to other professional services
- Truth needs to be separated from perception

ISSUE/COMMENT OCCURENCE	
Mentorship and Training	50%
Salary/Remuneration	37%
Career Development	32%
Tendering/Procurement	22%
Professional Registration	13%





#### **CAREER DEVELOPMENT**

- Exposure, Recognition and Responsibility
- Not being *Exposed* to quality engineering work
- Not receiving *Recognition* for work done (individuals and the within the industry)
- Lack of *Responsibility*, or *Responsibility* given above levels of ability
- Increased responsibility is also seen as a benefit to Career Development

ISSUE/COMMENT OCCURENCE	
Mentorship and Training	50%
Salary/Remuneration	37%
Career Development	32%
Career Development	<b>32%</b> 22%





#### **TENDERING/PROCUREMENT**

- Common theme through all Golden Thread Issues
- Fast-tracked work
- Added pressure
- Limited **training** opportunities
- Belief that **remuneration** is affected

ISSUE/COMMENT OCCURENCE	
Mentorship and Training	50%
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Professional Registration	13%





#### **PROFESSIONAL REGISTRATION**

- 47% of YP's believe that the registration process is unclear
- 47% of YP's believe process of registration is better defined for other professional services (Lawyers, Accountants etc.)
- 32% of YP's believe that their company does not implement their CU to provide support and training for YP's

ISSUE/COMMENT OCCURENCE	
Mentorship and Training	50%
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#### **JOB SATISFACTION**

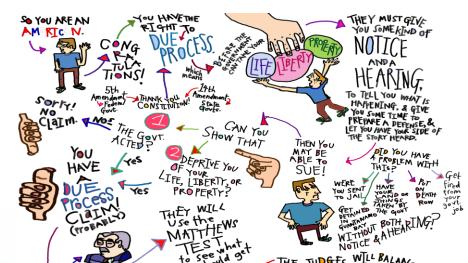
- **93%** of respondents are **proud** of what they do
- Only 9% of respondents indicated that they would study towards a different profession, for improved remuneration, given a second chance
- 70% believe their tertiary education prepared them for a career in engineering

# **DISCUSSION FORUMS**



CESA Consulting Engineers South Africa

- 1. MYPs contacted and informed;
- 2. In-house discussion forums conducted throughout WC;
- 3. All results (comments/answers) were collected;
- 4. Results were evaluated (13 companies)
- 5. Standard results were listed; and
- 6. Standard results converted to a narrative.







## **MENTORSHIP & TRAINING**

- Not referring to professional registration CE & CU;
- Very few formal mentorship programmes;
- Perceived up-skilling and cost risk;
- Formal mentorship should be mandatory;
- Mandatory mentorship to qualify Pr. Eng; and
- Potential for CESA to intervene.







## REMUNERATION

- Engineers are highly undervalued in society;
- There are better opportunities in other countries/vocations;
- **Tendering & procurement** process the biggest problem;
- ECSA fee scales are not effective as a guide;
- Increased salaries does not translate into better product; and
- Increased time pressure is the problem.





## **CAREER DEVELOPMENT**

- YPs exposed to poorer quality of work and work ethic;
- Volatile responsibility on projects;
- Mentors/supervisors have the greatest influence;
- YPs take on more responsibility;
- Value engineers provide society is not appreciated; and
- Long-term liability is not included.







## **TENDERING & PROCUREMENT**

- Noted as the **single biggest problem** by YPs;
- T&P processes have crippled the industry, and caused many YPs to look for work elsewhere;
- Authorities to appoint technically competent people;
- Low weighting on experience and competency;
- Tenders far too extensive + time consuming
- Industry representation poor.





## **PROFESSIONAL REGISTRATION**

- Majority don't understand new registration requirements;
- Majority don't think the new registration system is clear and concisely defined;
- Majority unsure as to when the **new system comes online**;
- Many unsure as to whether they should register on new or old system;
- Advertisement of new system is not adequate;
- Change over to will hinder ability to register;
- Who is accountable for the online system?



# A WAY FORWARD





#### **Mentorship/Training**

Institute mandatory mentorship and training Remuneration Hhhmmm.... To be continued. Career Development Control exposure and responsibility + recognise and reward hard work

Tendering & Procurement Discard, re-think & overhaul Professional Registration

Simplify, simplify, simplify.... Please!







# That's all folks!

