

CESA PRACTICE NOTE PN 45
ECSA GUIDELINE APPLICATIONS GUIDE

AVOID RECKLESS FEE DISCOUNTING

22 SEPTEMBER 2021



CESA PRACTICE NOTE 45: APPLICATIONS GUIDE ECSA SCOPE OF SERVICES AND REMUNERATION FOR CONSULTING ENGINEERING SERVICES

PREVIOUS WEBINAR 9 JUNE 2021

- ✓ **SUMMARY OF NEW ECSA GUIDELINE**
 - ✓ **REVIEW OF CESA PN 45**

WEBINAR 22 SEPTEMBER 2021

- **DANGER OF RECKLESS FEE DISCOUNTING**
- **ADVICE ON HOW TO CALCULATE YOUR FEE**

HISTORY OF CONSULTING ENGINEERING FEES IN SA

- Standard tariffs of fees applied by major public sector client bodies and CESA, all around 6% of cost of work.
- 1982 SA Council for Professional Engineers publishes R1113
- 1970's deregulation of fee tariffs elsewhere in the world.
- Fee tariffs strictly applied in SA. Competition contrary to Code of Conduct.
- 1980'2 first signs of fee discounting and some competition in private sector.
- 2002 R1113 replaced by ECSA Guideline Tariff of Fees
- Legislation introduced in SA after 1999 introduces notion of competitive selection of professionals.
- Competitive bidding is based on magnitude of discount offered
- 2012 ECSA Guideline omits fee tariffs
- 2020 ECSA develops new fee tariffs in line with other Built Environment Councils

PRINCIPLES OF DETERMINING FEES FOR CONSULTING ENGINEERING SERVICES

- **FAIR TO BOTH CLIENT AND CONSULTING ENGINEER**
- **EQUITABLE – THE FEE MUST REPRESENT FAIR VALUE FOR THE SERVICE PROVIDED**
- **TRANSPARENT**
- **COMPETITIVE**
- **COST-EFFECTIVE**
- **PROMOTION OF OTHER OBJECTIVES (PREFERENTIAL PROCUREMENT)**

RECKLESS FEE DISCOUNTING AND UNDER-PRICING OF CONSULTING ENGINEERS' FEES IS THREATENING THE FUTURE SUSTAINABILITY OF THE INDUSTRY IN SOUTH AFRICA. SOCIETY RELIES ON CONSULTING ENGINEERS FOR INFRASTRUCTURE DEVELOPMENT AND ECONOMIC GROWTH AND THEREFORE THE CURRENT SITUATION IS A THREAT TO THE COUNTRY WITH DISASTROUS CONSEQUENCES FOR EVERYONE.

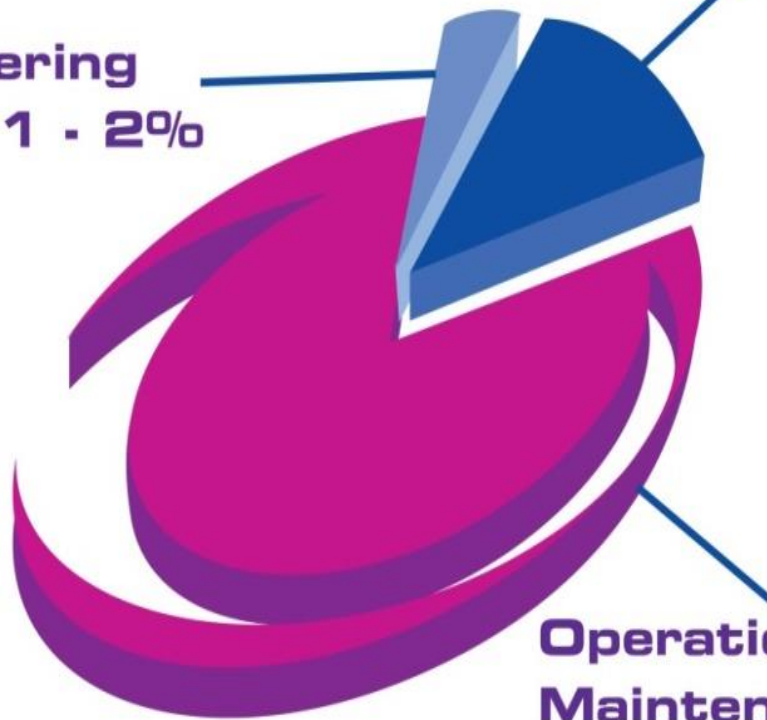
PROBLEM

REDUCED PERCENTAGE FEES AND FEE DISCOUNTS ARE TYPICALLY DETERMINED ON AN ARBITRARY BASIS WITH NO THOUGHT GIVEN TO THE ACTUAL COST OF PROVIDING THE PROFESSIONAL SERVICES

CONSEQUENCES

- CONSULTING ENGINEERING FIRMS OPERATE AT A LOSS
- STAFF WORK LONGER HOURS
- **UNDER-QUALIFIED AND INEXPERIENCED STAFF DO THE WORK**
- **CONSTRUCTION COSTS INCREASE** DUE TO LACK OF COST-EFFECTIVE DESIGN
- POOR PROJECT EXECUTION
- **PROJECT FAILURES**
- NO TIME OR RESOURCES FOR TRAINING AND MENTORING
- POOR SERVICE DELIVERY
- UNHAPPY CLIENTS
- SKILLED ENGINEERS LEAVE THE INDUSTRY
- A PROFESSION IN DECLINE
- **COLLAPSE OF INFRASTRUCTURE DEVELOPMENT IN SA**

**Engineering
Costs 1 - 2%**



**Construction
Costs 6 - 18%**

**Operation &
Maintenance 80 - 93%**

SOLUTION

CLIENT

- ✓ SELECT YOUR CONSULTING ENGINEER ON THE BASIS OF BOTH **QUALITY** AND **PRICE**
- ✓ PROVIDE A PROPER **TERMS OF REFERENCE** INCLUDING A DETAILED **SCOPE** OF WORK AND SERVICES, THE PROJECT **BUDGET** AND A **PROGRAMME** TO ENABLE THE CONSULTING ENGINEER TO PRICE PROPERLY
- ✓ ESTABLISH THE FEE NORM FOR YOUR PROJECT USING THE **ECSA TARIFF OF FEES** AS A GUIDE AND ENSURE THAT THE FEE YOU PAY IS WITHIN A REASONABLE RANGE OF THE NORM (SAY +/- 10%)

CONSULTING ENGINEER

- DO NOT GUESS - CALCULATE AND AGREE FEES WHICH ARE COMPETITIVE AND SUSTAINABLE

THE CORRECT PROCESS FOR CALCULATING THE FEE FOR CONSULTING ENGINEERING SERVICES

- **THE FEE MAY BE TIME BASED, PERCENTAGE BASED OR LUMP SUM, OR ANY OTHER AGREED METHOD**
- **USE THE ECSA GUIDLINE FEE TARIFFS (GAZETTE 44333, MARCH 2021) AS A BENCHMARK AND GUIDELINE**
- **CALCULATE THE FEE USING AN ELEMENTAL COST BUILD-UP**
- **ADJUST THE FEE TO ACHIEVE THE DESIRED PROFIT (ONLY A FOOL WOULD DELIBERATELY SUBMIT A PRICE KNOWING IT WILL RESULT IN A LOSS)**

METHODS TO CALCULATE THE HOURLY COST

1. ECSA GUIDELINE CLAUSE 4.4

2. DEPARTMENT OF PUBLIC SERVICE AND ADMINISTRATION

https://www.ecsa.co.za/regulation/RegulationDocs/DPSA_CONSULTANT_FEES_2013.pdf

http://www.dpsa.gov.za/dpsa2g/consultant_fees.asp

3. CALCULATE THE REAL HOURLY RATE FROM FIRST PRINCIPLES

METHOD TO CALCULATE YOUR HOURLY CHARGE OUT RATE

Formula for the hourly charge rate is : **$A/B \times C/D \times (1 + E)$**

A= Annual total cost of employment (say R480 000.00)

B= Net billable (working) hours per year (typically 1760 hours)

C = Overhead factor (typically 1,6 to 2,5 based on actual surveys)

D = Utilization or productivity or efficiency factor (typically 0,65 to 0,85)

E = Mark-up for profit (assume 30% resulting in after-tax profit of 15%)

Example: Hourly charge-out rate is **$480\ 000/1760 \times 1,9/0,85 \times 1,3 = \underline{R\ 792.00/\text{hour}}$**

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