ACHASM 2018 Two-Day Summit:

The Role of Procurement and Supply Chain Management in Construction Health and Safety

Topic: Costing and Pricing for Pr. CHSA Services

Presented by Peter Dobson



Outline

- Confirming the Clients needs
- Pr. CHSA Scope of Work
- Construction Project Complexity
- Construction Project Documentation Programme
- Capability Requirements
- Time, cost and effort
- Hourly Rate
- Total Fees



Confirming the Clients needs

- 1. Turnaround times
- 2. Consolidated H&S File expectations
 - Input into completed structure
 - Input into operational and occupiers H&S Management Systems
- 3. Degree of engagement
- 4. Insurances, facilities, risk and liability transfers



Determining the Pr. CHSA Scope of Work

- 1. Complete Scope of Work for Pr. CHSA with guarantees
- 2. Partial Scope of Work for Pr. CHSA without guarantees
- 3. Design Risk Management and responsibility of Designers
- 4. Access to existing Construction Project Documentation
- 5. Work with options 1 & 2 (Full & Partial)



Construction Project Complexity

| | Construction Project Feature | Low Complexity | Moderate Complexity | High Complexity |
|----|---|--|---|--|
| 1 | Size of project and consultant team | < 4 | 4-10 | >10 |
| 2 | CH&S Competency of project and consultant team (Designing for H&S, CH&S knowledge & experience etc) | Expert CHS levels | CHS Competency as non-core competency | Poor competency levels |
| 3 | Complexity of design (difficulty in constructability) | Simple design, well understood industry standard materials and methods | Typical design, materials and methods | Artistic, novel or untested designs, unusual methods or materials |
| 4 | Multi-layer design (sub-contracting of design) | None | Sub-contracting of designs by either consultant team or PC | Sub-contracting of designs by both the consultant team and Principal Contractors |
| 5 | Multi-layer sub-contracting | Single Principal Contractor | Single concurrent Principal Contractor, Single tier contractors | Multiple concurrent Principal Contractors or multiple tiers of sub-contractors |
| 6 | Time limitations (activity crashing) | No time constraints | Reasonable Time Constraints | Urgent or crashed works activities |
| 7 | Space limitations (congestion) | No space limitations | Ample space available | Limited space, e.g. city center; building footprint > 80% of site. |
| 8 | CHS budget limitations (degree of novel or design or programme related solutions) | No CHS budget limitations | Normal budget limitations as % of project value, e.g. 7% | Less than 7% of project value or no formal CHS budgeting |
| 9 | Degree of approvals from external project stakeholders / authorities for CHS items | Nil | DoL only | Multiple external stakeholders |
| 10 | Complexity of Client Representatives team | Single person | Single entity (department, company) | Multiple entities (departments, companies) |
| 11 | Degree of engagement with the Construction Client | High | Remote | Nil |
| 12 | Engagement with external stakeholders (local community labour or local community leaders) | Nil | Single stakeholder (Community Leader or immediate vicinity) | Multiple stakeholders (community leaders) or volatile local community |
| 13 | Remoteness of site | Major metropolitan area | Major city | Rural or remote |
| 14 | Inflexibility or non-negotiability of the Construction Clients project brief | Flexible | Negotiable | Inflexible |
| 14 | Other: | | | |



Construction Project Documentation Programme

- 1. Dates of milestones
- 2. Set milestones into Pr. CHSA Documentation Programme
- 3. (Later used to integrate CHS into CPDP)
- 4. Anticipated duration of Construction (revision 1)

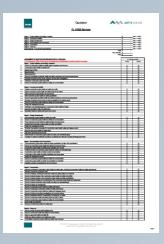


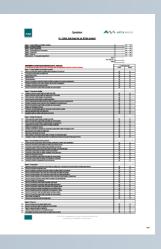
Pr. CHSA Capability Requirements

- 1. Take all information into account
- 2. No charging of school fees
- 3. Insight and process leverage
- 4. Limited technology leverage



Time, cost & effort





Excel 20180930_PrCHSA_Quotation Template & Hours tabs

- Assumptions
 - R70M contract value
 - 12 month construction period (Stage 5)
 - 16 month pre-construction period (Stages 1 to 4)
 - Pr. CHSA is competent Design Risk Management
 - Designers / Specifiers are competent in 'Designing for H&S'
 - 1 x Principal Contractor appointed
 - 1 full working day has 7 billable hours
 - Documentation is project specific
 - A CH&SPMBOK will be utilized
 - CH&S PM software cannot be leveraged beyond the capacity of advanced MSOffice software
 - Allow one hour of thought and insight for each page of salient CHSA project documentation, including review.
 - Hourly rates to determine overall fees include overhead charge outs and clerical staff.
 Foreseeably: Pr. CHS Agents at Category B.



Hourly Rate



ACCOUNTING OFFICERS OF DEPARTMENTS AND CONSTITUTIONAL INSTITUTIONS

> ACCOUNTING AUTHORITIES OF PUBLIC ENTITIES LISTED IN SCHEDULES 2 AND 3 TO THE PFMA

HEAD OFFICIALS OF PROVINCIAL TREASURIES

NATIONAL TREASURY INSTRUCTION NO. 03 OF 2017/2018

COST CONTAINMENT MEASURES

- 1.1 This Treasury Instruction repeals Treasury Instruction No. 2 of 2016/2017 or Cost Containment Measures for departments, constitutional institutions and public entities listed in Schedules 2 and 3 to the Public Finance Management Act (PFMA), 1899 (Act No. 1 of Acton)
- 1.2 Cost containment measures applicable to executive authorities will be prescribed in the revised Ministerial Handbook.

2 BACKGROUND

- Section 36(1/kg) of the PFMA requires accounting officers of departments and constitutional institutions to be responsible for the effective efficient, economical ransparent use of their responctive institutions; resources. Sections 36(1/kg) and 51(1/kg)(iii) of the PFMA require accounting officers and accounting authorities to take effective and appropriate sleps to manage the available working capital of their respective institutions efficiently and economically.
- 2.2 Accounting officers and accounting authorities are therefore required to implement control measures to ensure that all expenditure in their respective institutions is necessary, appropriate, cost-effective and is recorded and reported, as prescribed by the relevant landelstate framework.
- 2.3 In giving effect to this requirement, accounting officers and accounting authorities are responsible for ensuring that all employees are miniful of the current economic realities and the need to intensify efforts to improve efficiency in expenditure.
- 2.4 On 30 September 2016, the National Treasury issued Treasury Instruction No. 2 of 2016/2017 on cost containment measures which took effect from 1 November 2016.
- 2.5 During implementation of the Treasury Instruction mentioned in paragraph 2.4 above, it came to light that certain provisions are impractical to implement, honce posing difficulties to ensure full compliance with Treasury instruction. No. 2.0 d 2016/2017. Therefore mentions are considered and according authorities are required to implement the cost containment measures set out in peragraphs 4 and 5 below.

Guide on Hourly Fee Rates for Consultants



Department of Public Service and Administration

January 2003



Hourly Fee Rates For Consultants - With effect from 1 July 2018

| Salary Average Total | | l | Model A S | hort Term | Ferm Model B Long Term | | | ong Term | |
|----------------------|-----------|---------------|-------------------|-------------------|------------------------|---------------|----------------|-------------------|----------------|
| Band | Package | Optic | n A 1 | Optic | n A 2 | Optic | n B 1 | Optio | on B 2 |
| | | All Overheads | | Partial Overheads | | All Overheads | | Partial Overheads | |
| | | A 1.1 | A 1.2 No Mark- | A 2.1 | A 2.2 | B 1.1 | B 1.2 | B 2.1 | B 2.2 |
| | | Mark-up | No Mark- | Mark-up | No Mark- up | Mark-up | No Mark- up | Mark-up | No Mark- up |
| | | | | | | | | | - |
| 16 | 1 893 486 | 3 787 | 2 916 | 3 257 | 2 499 | None | None | None | None |
| 15 / 16 | 1 674 837 | 3 350 | 2 579 | 2 881 | 2 211 | 2 763 | 2 127 | 2 378 | 1 826 |
| 15 | 1 456 187 | 2 912 | 2 243 | 2 505 | 1 922 | 2 403 | 1 849 | 2 068 | 1 587 |
| 14/15 | 1 325 253 | 2 651 | 2 041 | 2 279 | 1 749 | 2 187 | 1 683 | 1 882 | 1 445 |
| 14 | 1 234 606 | 2 469 | 1 901 | 2 124 | 1 630 | 2 037 | 1 568 | 1 753 | 1 346 |
| 13/14 | 1 136 615 | 2 273 | 1 750 | 1 955 | 1 500 | 1 875 | 1 444 | 1 614 | 1 239 |
| 13 | 1 030 459 | 2 061 | 1 587 | 1 772 | 1 360 | 1 700 | 1 309 | 1 463 | 1 123 |
| 12 / 13 | 938 686 | 1 549 | 1 192 | 1 333 | 1 023 | 1 389 | 1 070 | 1 192 | 911 |
| 12 | 846 914 | 1 397 | 1 076 | 1 203 | 923 | 1 253 | 965 | 1 076 | 822 |
| 11/12 | 780 765 | 1 288 | 992 | 1 109 | 851 | 1 156 | 890 | 992 | 757 |
| 11 | 714 617 | 1 179 | 908 | 1 015 | 779 | 1 058 | 815 | 908 | 693 |
| 10/11 | 665 029 | 1 097 | 845 | 944 | 725 | 984 | 758 | 845 | 645 |
| | | | | | | | | | |
| 10 | 615 442 | 911 | 702 | 782 | 597 | 862 | 665 | 739 | 572 |
| 9/10 | 560 490 | 830 | 639 | 712 | 544 | 785 | 605 | 673 | 521 |
| 6 to 8 | 368 840 | 546 | 420 | 468 | 358 | 516 | 398 | 443 | 343 |

- 1. Determine the consultancy option/model by applying the following criteria
 - "Short Term" means less than 60 consulting days "Long Term" means more than 60 consulting days
 - "All Overheads" means consultant provides all overheads e.g., office, parking, telephone
 "Partial Overheads" means department provides some overheads e.g. office, parking, telephone
 - "Mark-up" provides for company profit margin service normally provided by consulting company
 "No Mark-up" service normally provided by individuals or NGOs
- 2. Determine the appropriate salany band based on the level of work that is required e.g., use job evaluation to determine the level of work that is required e.g., use job evaluation to determine the level of work Salary band 13 represents the level of a Director in the public service, 14 a Chief Director, 15 a DOS and 16 a DOS.
- 3. The hourly fee rate should be read where the consultancy option/model intersects with the salary band.
- 4. Fee rates exclude operational/project expenditure e.g., travelling, hotel acommodation, parking, and travel and

Note - The Guide on Hourly Fee Rates for Consultants and the latest Fee Rates are available at http://www.dpsa.gov.za and can be found under Document Archive, All Documents.
Link http://www.dpsa.gov.za/dpsa2g/documents.asp



RATES FOR REIMBURSABLE EXPENSES/#

For the full extent of the terms and conditions of the rates below, refer to: SECTION B REIMBURSEMENT TARIFFS FOR TYPING, PRINTING, DUPLICATING AND FORWARDING CHARGES' OF THE LETTER OF INVITATION TO CONSULTANTS OF SECTION C2.1 'PRICING INSTRUCTIONS' OF THE TENDER OR QUOTATION DOCUMENT FOR

TYPING AND DUPLICATING (EXCLUDING VAT)

Table 1: Rates for typing and duplicating undertaken by the consultant himself.

| | Typing of | | Duplicating | | | | Printed or copied | |
|------------|---------------------------|----------------|-------------|----------------------|-------|------------|-------------------|--|
| From | original/master per A4 | On white paper | | On coloured paper | | binder set | | |
| | | A4 | A3 | A4 | A3 | A4 | A3 | |
| 2005-03-01 | R18,00 | R0,35 | 80,70 | | | 87,00 | R9,00 | |
| 2009-08-15 | R20,00 | 80,55 | R1,00 | R0,65 | R1,15 | R14,00 | R18,00 | |
| 2013-01-01 | R22,00 | R0,65 | R1,60 | R0,90 | R1,70 | R18,00 | R24,00 | |
| 2017-09-01 | R28,00 | R0,83 | R2,10 | R1,20 | R2,40 | R26,00 | R34,00 | |

| From | Duplical | ting in colour |
|------------|----------|----------------|
| | A4 | A3 |
| 2009-08-15 | *R7,00 | *R11,00 |
| 2013-01-01 | *88,00 | *R13,50 |
| 2017-09-01 | *R8,50 | *R14,00 |

* Payable only upon prior written approval by Departmental Project Manager

DRAWING DUPLICATION (EXCLUDING VAT)

Table 2: Rates for drawing duplication undertaken by the consultant himself.

| | Duplicating | | | | |
|------------|-------------|--------|--------|--|--|
| From | A2 | A1 | AO | | |
| 2005-03-01 | R7,00 | R10,00 | R15,00 | | |
| 2009-08-15 | R10,00 | R14,00 | R22,00 | | |
| 2013-01-01 | R15,00 | R20,00 | R33,00 | | |
| 2017-09-01 | R18,00 | R26,00 | R40,00 | | |

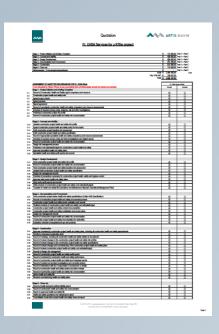
For the full extent of the terms and conditions of the rates below, refer to: SECTION C 'TRAVELLING AND SECTION C2.1 'PRICING INSTRUCTIONS' OF THE TENDER OR QUOTATION DOCUMENT FOR CONSULTANTS

Note /# E & OE. The information contained in these consultant's original appointment take precedence



| Item No. | Item | Rate (excl VAT) | | | |
|---------------|---------------|---|--|--|--|
| 1 | Hourly Rate | R1,250.00 for Principal; R 950.00 for CHS Agent; R750 for CHS Officer | | | |
| 2 | Travel Time | Hourly rate less 50%, 1st hour not billed | | | |
| 3 | Mileage | NDPW Rates, estimate R4.00 / km, 1st 50km not billed | | | |
| 4 Subsistence | | R400.00 / day | | | |
| 5 | Accommodation | R900.00 / night, dependent on season & locale | | | |
| 6 | Car Rental | Group B | | | |
| 7 | Airfare | Economy Class | | | |





Excel 20180930_PrCHSA_Quotation - Rates Tab

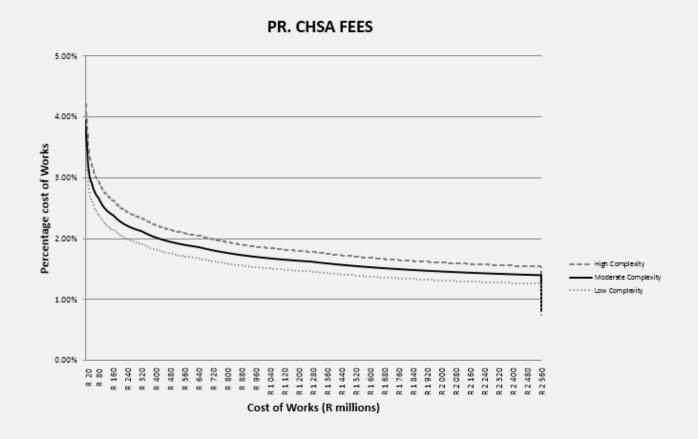
- Options 1 & 2
- Learn to negotiate
- Understand the audience's language



20140714_PrCHSA_FeeScaleWithAssumptionsAndDeliverables

Post PROCSA based fee scale

Same process performed with projects of various Contract works values.

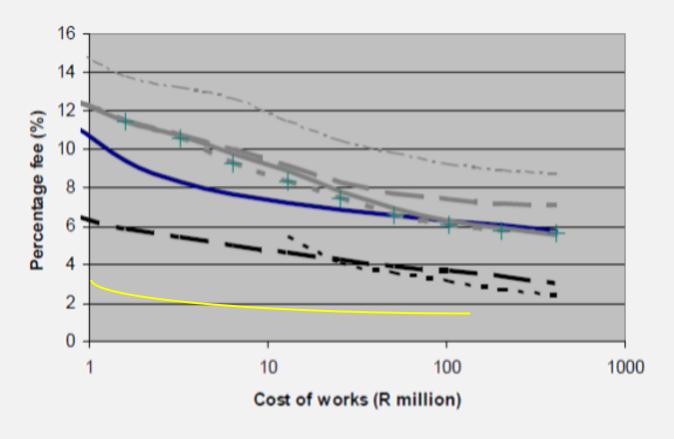




| Cost Bracket | Cost of the Works: From | Cost of the Works: To | Primary Fee | Add % | For value over |
|-----------------|-------------------------------|-----------------------------|--------------|-------|-----------------|
| 1 | R - | R 10,000,000 | R 5,195 | 3.30% | R - |
| 2 | R 10,000,000 | R 20,000,000 | R 335,086 | 2.97% | R 10,000,000 |
| 3 | R 20,000,000 | R 40,000,000 | R 632,248 | 2.67% | R 20,000,000 |
| 4 | R 40,000,000 | R 80,000,000 | R 1,166,309 | 2.41% | R 40,000,000 |
| 5 | R 80,000,000 | R 160,000,000 | R 2,128,450 | 2.11% | R 80,000,000 |
| 6 | R 160,000,000 | R 320,000,000 | R 3,819,989 | 1.86% | R 160,000,000 |
| 7 | R 320,000,000 | R 640,000,000 | R 6,795,767 | 1.60% | R 320,000,000 |
| 8 | R 640,000,000 | R 1,280,000,000 | R 11,916,100 | 1.38% | R 640,000,000 |
| 9 | R 1,280,000,000 | R 2,560,000,000 | R 20,727,063 | 1.18% | R 1,280,000,000 |
| 10 | R 2,560,000,000 | and above | R 35,888,570 | 1.02% | R 2,560,000,000 |

| Project stage | Description | % of Total Fees |
|------------------|--|--------------------|
| 1 | Project initiation and briefing | 5% |
| 2 | Concept and feasibility | 20% |
| 3 | Design development | 20% |
| 4 | Tender documentation and procurement | 10% |
| 5 | Construction and contract administration | 40% |
| 6 | Project close out | 5% |
| | | 100% |





Where cost of works is relative to the respective discipline.





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Thank-you

