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# Best practice model for price / quality evaluation

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11 May 2017

## The question

- *When budget settlements are so tight, what is the best practice model for price/quality evaluation and scoring methodologies?*
- *Is there a creative way of going beyond conventional price/quality formulae?*
- *Should we use price:quality ratios?*

## Introduction

- Legal parameters
- Life-cycle costing
- The current landscape – commonly used formulae
- Unintended consequences of commonly used formulae
- Other formulae
- Price : quality ratios

## Legal parameters

- Public Contracts (Scotland) Regulations 2015
  - Regulation 67(1):
    - Must award on the basis of most economically advantageous tender (MEAT) from the view of contracting authority
    - May not use price only or cost only

## Legal parameters

- Public Contracts (Scotland) Regulations 2015
  - Regulation 67(2):
    - Must identify MEAT on the basis of the best price-quality ratio
    - Must be assessed on the basis of criteria linked to the subject matter of the contract
    - Must include price or cost, using a cost-effectiveness approach

## Life-cycle costing

- Regulation 68
- Example: Crown Commercial Services total cost of ownership calculator for desktop and laptop PCs:
  - Acquisition costs
  - Operation costs
  - Disposal costs

## Current landscape – commonly used formulae

- Price : quality ratio
- Quality evaluation - quality score
- Price evaluation – price score
- Apply weighting
  - Scottish Government procurement journey suggested weightings
  - Audit Scotland - internal guidance

## Scottish procurement journey - ratios

Commodity/Service Type	Description	Suggested Price/Quality Ratio
Routine	<ul style="list-style-type: none"> <li>•Low Value/High Volume</li> <li>•Many Existing Alternatives</li> </ul>	80:20
Leverage	<ul style="list-style-type: none"> <li>•High spend area</li> <li>•Many Sources of Supply</li> <li>•Commercial involvement can influence price</li> </ul>	60:40
Strategic	<ul style="list-style-type: none"> <li>•Strategic to Operations</li> <li>•Few Sources of Supply</li> <li>•Large Spend Area</li> <li>•Specification may be complex</li> </ul>	60:40; 50:50; 40:60
Bottleneck	<ul style="list-style-type: none"> <li>•Few Sources of Supply and alternatives available</li> <li>•Complex specifications</li> <li>•If supply fails, impact on organisation could be significant</li> </ul>	40:60; 10:90

## Audit Scotland (internal guidance) - ratios

Type of project	Indicative price/quality ratio
Feasibility studies / options appraisal	20:80 to 10:90
Innovative projects	30:70 to 15:85
Complex projects	40:60 to 20:80
Straightforward projects	70:30 to 40:60
Repeat projects	90:10 to 70:30

## Price : quality ratios

- Issues:
  - Set quality too high, ‘neutralises’ price - favours most expensive option
  - Set price too high, ‘neutralises’ quality – favours cheapest option
- *Europaiki Dynamiki – Proigmena (Case T461/08)*
- *Traffic Signs & Equipment Ltd v Dept for Regional Development*

## Price evaluation

- Standard differential model

$$\left[ \frac{\textit{Lowest price}}{\textit{Tendered price}} \right] \times 100 = \text{Financial Score}$$

## Price evaluation

Tender	Price (£)	Applied formula	Price score
A	50	$(50/50) \times 100$	100
B	75	$(50/75) \times 100$	67
C	100	$(50/100) \times 100$	50

- Price score of Tender B is 67, not 75, despite its price being exactly in the middle of the highest and lowest priced tenders

## Price evaluation

- Example table summarising scores

Bidder	Price (£)	Price score (60)	Quality Score (40)	Total (100)
Awesome Tech Co	10,000	48.00	38	86.00
Super I.T.	9,000	53.33	33	<b>86.33</b>
I.T. Is Us	8,000	60.00	15	75.00

## Price evaluation

- Example of additional bidder affecting scores

Bidder	Price (£)	Price score (60)	Quality Score (40)	Total (100)
AwesomeTech Co	10,000	42.00	38	<b>80.00</b>
Super I.T.	9,000	46.67	33	79.67
I.T. Is Us	8,000	52.50	20	72.50
Even Cheaper I.T.	7,000	60.00	15	75.00

## Price evaluation

- In the first table, Super I.T. wins
- In the second table, Awesome Tech Co wins despite its bid being identical to that in the first table.
- Under the standard model, the outcome can change solely as a consequence of the price bid by other unsuccessful tenders

## Price evaluation

- Fixed price tenders - compete on quality only
- More extensive use of minimum standards – focus on price
- Cost savings against existing budget

## Price evaluation

- Wide variety of alternative formulae:
  - Average scoring
  - Bid spread
  - Maximum price deviation model
  - Waterschap Brabantse Delta
  - Kuiper's Superformula

## Price evaluation

- Alternative: quality divided by price
- Answer is the number of quality units per £
- Score is not affected by price bid by others

Tender	Quality score	Price (£)	Quality/Price
A	50	10	5.0
B	66	12	5.5
C	60	15	4.0
D	75	15	5.0

## Price evaluation

- Adjusting quality / price for weightings (40:60)
- Weighting reflects how much more authority willing to pay for quality above minimum standard

Tender	Basic score for achieving minimum quality	Quality above minimum	Total quality score	Total price	Quality / Price (x £10k)
A	60	0	60	80k	7.5
B	60	10	70	90k	7.8
C	60	40	100	150k	6.7

## Conclusion

- Be aware of issues with commonly used models
- One size does not fit all
- Run many scenarios with proposed model to ensure no unintended consequences
- Some models will require good market understanding / research

Q/A