# PUBLIC PROCUREMENT WORKING GROUP GUIDELINE FOR AUDITORS 

Michael Hacljiloizou
AUDIT OFFICE OF THE REPUBLIC OF CYPRUS

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LISBOA

# WHEN EMBARKING ON AN AUDIT OF PROCUREMENT AUDITORS ARE AWARE OF: 

* Existing management system
* Legal and administrative provisos for procurement, and
* Technical requirements of project

The latter tends to be sometimes neglected by auditors

Examples of this neglect are the audit of:

* The estimation of the contract value (cost estimate)
* The evaluation of tenders


## AUDIT OF COST ESTIMATE

$\square$ Besides being the criterion for publication in the Official Journal of the European Union (OJEU), its most important purpose is its use as a tool of comparison with the tenders received

Therefore it must be:

- Credible
* Reliable

The estimate will assist in the prevention of
Collusion
Monopolistic exploitation

## AUDIT OF COST ESTIMATE

$\square$ Its importance is further amplified in

* The Restricted Procedure
* The Negotiated Procedure, and
* Framework Agreements
where the possibility of collusion is greater as compared to the Open Procedure.


## AUDIT OF COST ESTIMATE

Its submission must be prior to tender opening
$\square$ Its preparation can be based on:

* Market prices (e.g Machinery, Plant)
* Previous tenders (e.g Medicines)
* Internet (e.g Spare parts)
* own data bank (e.g construction projects)


## AUDIT OF COST ESTIMATE

A. For audit purposes we can check that:
-Unit rates / prices are reasonable. These are compared with rates and prices of previous similar contracts taking into account:
$\checkmark$ Size/magnitude/quantity of project
$\checkmark$ Conditions of execution/implementation/performance of the proposed work (e.g. contract period, geotechnical conditions etc)
$\checkmark$ Geographical location of the project
$\checkmark$ Revisions and amendments because of changes to basic cost contributing factors e.g. labour cost, fuel cost etc
$\checkmark$ Inflation since the tender submission date

## AUDIT OF COST ESTIMATE

$\checkmark$ Other factors e.g. interest exhibited by contractors or the abundance or lack of available work.

- Abundance of work => prices high
- Lack of work => prices low
B. It is good practice to report all assumptions made, i.e. previous tenders used for the extrapolation of the cost estimate. All these should be recorded.


## AUDIT OF EVALUATION

All evaluation reports should had been assessed by an Employer's Committee
The evaluation criteria should had been clearly stated in tender documents
In case the tender provides for the best evaluated tender and not the lowest tender price then inter-alia, the following should had been considered in the evaluation:

1. Tender Sum
2. Supervision/Inspection Cost (poor Quality Assurance)
3. Cost of Dealing with Non - Conformance
4. Corrective Action of Non - Conformance
5. Cost of Continuing Monitoring/Assessment
6. Administration Cost
7. Variation from Optimum Material Cost - Estimated Vs Actual
8. Sample/Testing/Training Cost
9. Maintenance Costs
10. Operational Costs

The audit can look into:

* Evaluation procedure according to tender conditions - clearly described criteria
* Recommendation which must be compliant with tender conditions and in conformity with predetermined criteria
* Evaluation of tenderers responsiveness (what constitutes noncompliance)
* Comparison with estimate or independent estimate to establish reasonableness and logic of price
* If high prices in all tenders, it may be attributed to:
- Tortuous conditions
- Short period for submission of tender
- Short period for contract execution
- Collussion amongst tenderers Ifabrication of prices
- Wrong cost estimate
* Are there any major deviations from tender conditions?
* The auditor should carry out a brief technical scrutiny to ensure compliance with requirements
$\square$ Contracts, as we all know, should be awarded on the basis of objective criteria which ensure compliance with the principles of
* Transparency
* Non discrimination
* Equal treatment
$\square$ Tenders should therefore be assessed in conditions of effective competition and as a result we can only have two award criteria
* The lowest price
* The most economically advantageous tender


## The most economically advantageous tender

$\square$ In an evaluation process the Contracting Authority (CA) is sometimes called upon to evaluate a technical proposal and then somehow merge this with the financial proposal. The "two envelope method" could be used in this case.

It is a procedure where tenderers submit their proposal in two parts:

* one envelope containing the technical proposal. This is evaluated according to predefined criteria set in the Request For Tenders
* one envelope containing the financial proposal.

This process aims to find the MOST ECONOMICALLY ADVANTAGEOUS TENDER
where the CA wishes to award a tender with the best value for money method

## The most economically advantageous tender

$\square$ This method can take into account various criteria such as quality, price, technical merit, aesthetic and functional characteristics, environmental characteristics, running cost, cost effectiveness, after sales service and technical assistance, delivery date or period of completion etc

To avoid the subjective and arbitrary use of technical criteria it is widely accepted that a mathematical formula, such as or very similar to the one below is established

Weighted Average Score = A . (T/Tmax) + B . (Fmin/F)
where:

## The most economically advantageous tender

A = Quality coefficient (technical weighting factor)<br>B = Price coefficient (financial weighting factor)<br>T = Score of Technical Proposal<br>Tmax = Score of Best Technical Proposal<br>F = Tender Sum<br>Fmin = Lowest Tender Sum<br>$A+B=100 \%$

$\square$ Formula should be specified in tender documents
$\square$ Formula is used to calculate the combined markings of the financial and technical proposals (weighted average score)

Selection of an unjustifiably expensive tender can be avoided if the CA includes suitable tender provisions such as:
(a) Forbidding the submission of tenders beyond a maximum fixed percentage e.g $\mathbf{1 2 0 \%}$ of the genuine pre-estimated contract cost (ceiling), or
(b) by defining the proportion of the quality to price co-efficients (ratio) in such a way, so as to exclude the selection of an excessively expensive tender, as compared to another which is to acceptable quality but of a lower price.

## The most economically advantageous tender

By adjusting the coefficients A(quality) and B (price), the CA can place more weight where they wish, quality or price
$\square$ Word of warning: in most cases they will want the best (even for routine supplies, so be prepared to see $\mathbf{8 0 : 2 0 , 7 0 : 3 0 , ~ e t c ) . ~ T h i s ~}$ however, in most cases is neither efficient nor effective and certainly not economical.

These technical and financial weighting factors A and B:

* Reflect how much more the CA is willing to pay in order to obtain better quality and consequently select a more expensive tender.
* There is a price advantage for even the lower ratios, such as 20:80 or 30:70 (as opposed to 80:20 or 70:30) where quality is predominant at the expense of price.


## The most economically advantageous tender

This is clearly shown in Table 1, where:

- For a 30:70 technical:financial coefficient ratio and a 20\% difference in the technical score the CA is expected to pay 10,5\% more for the higher marked tender
- For a 70:30 technical:financial coefficient ratio and a 20\% difference in the technical score the CA is now expected to pay 108\% more.
* Worth noting (see fig. 6) is the much steeper increase in the \% Price Difference as the ratio of $A$ :B increases from $\Delta=5 \%$ to $\Delta=25 \%$.


## Example 1:

Applying the formula for two tenders - both with a technical mark above 70\% - having a difference of say 20 marks in the technical score (e.g. 95\% and 75\%), then the following prevail:

For a ratio $20: 80$ the C.A. may pay up to $6 \%$ more
For a ratio 30:70 the C.A. may pay up to $10 \%$ more
For a ratio 40:60 the C.A. may pay up to $16 \%$ more
For a ratio 50:50 the C.A. may pay up to $27 \%$ more
For a ratio 60:40 the C.A. may pay up to $46 \%$ more
For a ratio 70:30 the C.A. may pay up to $96 \%$ more
For a ratio 80:20 the C.A. may pay up to $533 \%$ more
Consequently if the Contracting Authority is willing to pay up to $\mathbf{3 0 \%}$ extra for the qualitative difference between two acceptable tenders then it must exclude the ratios 60:40, 70:30 and 80:20.

## Example 2

| Tenderer $\mathrm{A}:$ | Tenderer $\mathrm{B}:$ |
| :--- | :--- |
| $\mathrm{T}_{\mathrm{A}}=70$ | $\mathrm{~T}_{\mathrm{B}}=85$ |
| $\mathrm{~F}_{\mathrm{A}}=100.000 €$ | $\mathrm{~F}_{\mathrm{B}}=?$ |

If the technical to financial coefficients ( $A: B$ ) prescribed in the tender documents, is 60:40 and since the difference in the Technical Scores is 15, then the corresponding percentage price difference (see Table 1 and Fig. 3) is $36 \%$. This means that tenderer B would be the successful bidder, if his tender is lower than $€ 136.000$.

Difference in Technical score, $\boldsymbol{\Delta}=5 \%$


Fig. 1 Technical:Financial coefficients (A:B)


Difference in Technical score, $\boldsymbol{\Delta}=\mathbf{1 5 \%}$


Fig. 3 Technical:Financial coefficients (A:B)

Difference in Technical score, $\boldsymbol{\Delta}=\mathbf{2 0} \%$


Fig. 4 Technical:Financial coefficients (A:B)

Difference in Technical score, $\boldsymbol{\Delta}=\mathbf{2 5 \%}$


Fig. 5 Technical:Financial coefficients (A:B)
TABLE 1
(values corresponding to Fig. 1 to 6)

| Technical:Financial coefficients <br> (A:B) | \% Price difference |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | for $\boldsymbol{\Delta = 5 \%}$ | for $\boldsymbol{\Delta = 1 0 \%}$ | for $\boldsymbol{\Delta = 1 5 \%}$ | for $\boldsymbol{\Delta = 2 0 \%}$ | for $\boldsymbol{\Delta = 2 5 \%}$ |
| $20: 80$ | 1.7 | 3.2 | 4.6 | 5.9 | 7 |
| $30: 70$ | 2.9 | 5.7 | 8.2 | 10.5 | 12.7 |
| $40: 60$ | 4.7 | 9.1 | 13.3 | 17.4 | 21.3 |
| $50: 50$ | 7.1 | 14.3 | 21.4 | 28.6 | 35.7 |
| $60: 40$ | 9.7 | 23.1 | 36 | 50 | 65.2 |
| $70: 30$ | 18.4 | 41.2 | 70 | 107.8 | 159.1 |
| $80: 20$ | 36.4 | 100 | 240.1 | 800 | 2000 |

NB: 1. $\Delta=$ Difference in Technical score
2. All above examples assume a tender with a lowest Technical score of $\mathbf{7 0 \%}$

Difference in Technical score, $\boldsymbol{\Delta} \mathbf{5 - 2 5 \%}$


Fig. 6 Technical:Financial coefficients (A:B)

