Međunarodna konferencija

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15 GODINA

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PRAVNA ZAŠTITA U JAVNOJ NABAVI

I would like to thank President Goran Matesic and the whole State Commission for the Supervision of Public Procurement Procedures in Croatia for the kind invitation, which I have been honoured to accept.

I was very pleased to be asked to speak about MEAT, since from the beginning of my involvment with public procurement (PP), as Economic Advisor of Consip (2004-2008) the Italian Procurement Authority for goods and services centralised in Rome, delivery of *best value for money* has been a fundamental issue in my PP related activities.

Yet, I'm the sole responsible for the content of this presentation which reflects only my personal views

Indeed, since the 2004 EC Directive on PP, and even more so in the 2014 EC Directive in PP, delivery of *best value for money* plays a crucial role.

A EC main message seems clear: because PP counts for a massive share of the EU GDP (about 16%-18%), and because of tighter public finance across many EU countries, in doing PP is no longer sufficient to be *legally impeccable* since economic *efficiency-effectiveness* is also very important.

I will organise my presentation in five, perhaps obvious, yet in my view important observations.

First Observation

Often the *MEAT* criterion is compared with the *lowest price (LP)* award criterion *as if* they were two completely different approaches.

In fact they are NOT really different, since LP is just a *particular* case of MEAT, where potential suppliers rather than competing on both price and quality compete on price *only,* because quality is fixed in the public call.

Likewise, though much less used in PP, another *particular case* of MEAT would be a *best quality(ies) only* criterion, where the contracting authority would specify in the public tender a budget to spend completely and ask bidders to submit their *best quality offer* for that amount.

Second Observation

So, what are the economic consequences of allowing bidders to compete on both price and quality, the more common interpretation of MEAT?

The main implication is that in this case *competition* would be *more open and more flexible,* than when fixing quality or a monetary budget, providing the contracting authority (CA) with a higher chance to find the best available (in the market) *price-quality combination* and, in principle, *increase the number of bidders* who could potentially win the contract competition. As a consequence of attracting a higher number of firms, competition could also become more intense.

However, if CA *does not want flexibility on price or quality* then lowest price, or best quality, only would do.

Therefore, in adopting the MEAT criterion CA *must be aware* that it is *willing to trade-off price for quality.* That is, that it would be *indifferent* between *a lower price-lower quality* combination and a *higher price-higher quality* combination.

Third Observation

Typically the MEAT is identified through scoring formulae (SF), which perform two main functions:

i)   homogenize different units of measurements in the bidder's offer
ii)   they *are a proper* representation of the CA preferences

Of the two, function (ii) is fundamental to identify MEAT for CA.

If the SF is not a good representation of the CA desiderata then it would not capture MEAT and would not deliver best value for money

For this reason, the main components of a SF must be carefully designed for them to reflect CA's preferences.

Such care design should start from the *very beginning*. For example, based on my experience it is typically taken as granted that the total score assigned by CA to an offer should be computed by CA as the sum of the score assigned to price and the score assigned to quality dimensions, as follows.

$$S_{Total} = S_{Price} + S_{Quality}$$

If CA X adopts this criterion it would be *indifferent* for example between offer

$$A = (S_{Price} = 9, S_{Quality} = 1) \text{ hence } S_{Total} = 10$$

and offer

$$B = (S_{Price} = 5, S_{Quality} = 5) \text{ hence } S_{Total} = 10$$

Because the two proposals would receive the same total score.

Such proposals differ in the sense that A obtains a very high score for price but low for quality, (a *low price-low quality* type of offer) while proposal B receives the same score in the two components (a *reasonable price-reasonable quality* type of offer)

However, suppose instead that CA Y would assign the total score to an offer as follows

$$S_{Total} = (S_{Price})(S_{Quality})$$

that is by taking the product of the price and quality scores. Then when considering offer

$$A = (S_{Price} = 9, S_{Quality} = 1) \text{ hence } S_{Total} = 9$$

and offer

$$B = (S_{Price} = 5, S_{Quality} = 5) \text{ hence } S_{Total} = 25$$

Y will now prefer offer B to A. Why? Because as compared to X the desiderata of Y,
 as expressed by the moltiplicative scoring rule, clearly indicate a preference for *intermediate,
rather than extreme, levels* of price and quality. For Y only offer C, with much lower equal scores, is indifferent to A

$$C = (S_{Price} = 3, S_{Quality} = 3) \text{ hence } S_{Total} = 9$$

Fourth Observation

The *weights* assigned to the price and qualty scores are fundamental for CA to drive the competition in the desired direction.

For example, suppose in a competitive tendering, where the maximum number of points that companies can obtain is 100 and the maximum acceptable price is $p_{Max} = 200,$ CA uses the additive SF

$$S_{Total} = S_{Price} + S_{Quality}$$

where S_{Price} is linear and equal to

$$S_{Price} = \frac{w_{Price}(200 - p_{Offer})}{200} = \frac{70(200 - p_{Offer})}{200}$$

Then $w_{Price} = 70$ is the *weight assigned to price*, and represents the maximum number of points a bidder can obtain in the competition with his price offer.

With this rule $w_{Price} + w_{Quality} = 100$, hence the higher w_{Price} the easier is for a bidder offering low prices to win the competition, because most of the available 100 points are assigned to the price component of the offer.

Therefore, with a high w_{Price} it is likely that competition will be won by a *low price-low quality* offer.

Indeed, if CA is completely uncertain on the participating firms, and in the market low-high quality firms are uniformely distributed, then the ratio $\frac{w_{Price}}{100}$ *could be interpreted* as the probabilty that a *low quality* firm would win.

Likewise if the SF is multiplicative, still with 100 points available

$$S_{Total} = 100 S_{Price} S_{Quality}$$

CA uses the additive price rule S_{Price} now *could* be

$$S_{Price} = \frac{\left(200 - p_{Offer}\right)^{w_{Price}}}{200} = \frac{\left(200 - p_{Offer}\right)^{30}}{200}$$

where $w_{Price} = 30$ is the weight assigned to the price offer, since it is the power of a positive number less than one.

To summarise, the appropriate definition of the most important elements in a scoring formula is crucial to drive the competition in the direction desirable for CA.

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Fifth Observation

Consider again the additive scoring rule

$$S_{Price} = \frac{70(200 - p_{Offer})}{200}$$

Then to obtain the 70 points available to the price offer, the company should offer a price $p_{Offer} = 0$. Therefore the ratio

$$\frac{200}{70} = 2.86$$

can be interpreted as the *Monetary Value of a Point* (MVP) in the price offer. That is how much money is needed (in terms of discount from the maximum price) to gain a single point with the price offer. For example, to obtain 10 points with the price offer a discount of 28.6 would be needed and so the submitted price should be $200 - 28.6 = 171.4$

Suppose the procurement is for lap tops and that, on the quality side of the offer, the required minimum storage capacity is $1Mb$. Suppose further that for every additonal $0.1Mb$ offered bidders obtain 1 additional point.

However assume that on average, for companies in the market, an additional $0.1Mb$ costs $2€$.

Then it is clear that gaining an additional point in the competition is less expensive on the quality score than on the price score.

The opposite would be true if the average cost for offering an additional $0.1Mb$ was for example $3€$, higher than the MVP for the price offer.

Therefore, if an additional point does not have the same monetary value in the price and in the quality parts of the SF, we should expect competition among bidders to be biased more towards the component with lower monetary value.

During my consulting period for CONSIP there was continuous work towards improving and calibrating SF

After some initial problems CONSIP has been able to identify SF delivering satisfactory levels of price and quality for the public sector.

To summarise, for capturing MEAT formulae should:

1) be sufficiently simple and clearly formulated in the tender to be easily understood by participants
2) be an accurate representation of CA preferences
3) attract enough participants for competition to take place
4) discourage collusive behaviour
5) whenever possible try to avoid subjective evaluation of quality. If impossible, rely on expert and highly reputed officials-independent experts

Thanks for your attention