How to derive MEAT Criteria?

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Introduction and goal

In the European Directive 2014/24, in article 67, the definition of the award criteria is given. Clients are obliged to use the Most Economically Advantageous Tender (MEAT) as the award criteria. This means that other criteria than price can be taken into account in the review of the offer. Although it is still possible to only use price (see article 67.2) EFCA strongly recommends clients to use MEAT, using other criteria than only price.

The guidance is meant as a tool for (public) clients who want to select a engineering consultant but it can also be used in selecting a contractor. It can therefore serve as a tool for member firms who act as a client consultant. It is generic in the sense that is can be used in infrastructure and building projects.

This guideline is describing a methodology that leads to the right criteria. The methodology consists of five steps and must lead to the ultimate goal: select the best offer in terms of quality and price, given the specific elements of the project. It will lead to an outcome that will show that cost-based selection will constrain het project outcome.

Award criteria are different from selection criteria. This Guideline is about MEAT, and therefore we only look at award criteria. In the Appendix general information about selection- and award criteria is given.

In some countries, clients are using Best Value Procurement (BVP) in procuring consultants (and even contractors). There are a lot of similarities between MEAT and BVP, but in fact, BVP is part of a totally different approach of project management, in which BVP is only one phase in a total process. BVP can be seen as a specific application of MEAT.

Methodology

In order to derive good and sound MEAT criteria, a systematic approach is necessary. In the next pages we describe 5 steps, that should lead to a good set of award criteria. These are:

1. Formulate main project goals;
2. Derive possible quality criteria;
3. Choose a maximum of 4 criteria;
4. Attribute weights to the criteria;
5. Test your set by performing a crash test.

MEAT criteria are award criteria, not selection criteria. This means that they are not meant to judge the bidder, but to assess the bid. The assessment of the bidder is done in the previous phase, by using selection criteria.

Step 1: Formulate main project goals

The first step looks simple, but it may cause some discussion in the project team. The project goals cannot be the scope, so it can never be "the execution of the project" or "the delivery of 150 km of railway". In accordance with the EU directives, the subject matter of the contract (the scope) should be clearly established so that bidders can decide whether or not to participate.

The project goals can be sorted into two main groups:

- Goals that are associated with the product, the delivery of the project;
- Goals that concern the process of realization.

The first group relates to the product, the realized project. The second one relates to the implementation process, but not with the outcome. The first group is used when selecting a engineering consultant, the second is mainly used when selecting a contractor.

The project goals can at first be found in the answer of the "why" question. The widening of an existing road is the solution of a problem, such as too much congestion. A new wing on a hospital is the answer to the problem of too much patients and not enough space. In this last example, the project goal is perhaps not so easy to define. Possibilities are:

- The need to treat more patients;
- Increase hospital capacity;
- Decrease the queue of patients.

In order to develop the right criteria, it is very important to define the project goals very carefully.

Project goals can also come from other sources. For example, in a city the need for the limitation of disturbance is very important, because the city wants to create support for the project. Or perhaps it is simply a policy in all major projects in town. In this case, a project goal can be: "minimize disturbance for citizens".

Another example of a process-where the project goals are to minimize CO2 emission when executing the project. If the contractor uses electric cars instead of diesels, he minimizes the CO2 emission, but the result of the project (a bridge or a building), is still the same.

A project goal can be a faster delivery, so it is again about the process. The execution phase is crucial and needs to be optimized and more efficient in time, but the result remains the same.

Step 2: Derive possible quality criteria (MEAT)

There is a whole range of possible criteria, but they should always fit the project and its goals.

When formulating the Quality award criteria, it is necessary to consider the following aspects:

- The criteria must be contract related;
- A non-discriminatory application without the possibility of a subsequent arbitrary decision must be ensured**;**
- The information of the participants must be verifiable;
- The selection guideline should give enough information to the bidders;
- The weighting of the quality criteria must be well thought of and needs to be effective;
- A graduated ranking possibility is necessary so that a real quality ranking of offers is possible instead of giving yes/no score points for only fulfilling a requirement;
- In a two-stage procurement procedure the same aspect may not be used for selection;
- Be aware that criteria cost money for the bidders; the more criteria and the more complex, the higher the transaction costs;
- Innovation is not a criteria in itself; if wanted in a project, innovation should be assessed by the added value on the project goals.

Depending on whether the focus of the contract is on consulting or planning services, the award criteria are designed differently (for planning services the solution is in the form of planning concepts with according sub-criteria; for consulting and planning services with according sub-criteria such as schedule concepts, personnel deployment concepts etc.)

We define the next criteria fields:

- Functionality
- Availability
- Esthetics
- Sustainability (of the product)
- Sustainability (of the process)
- Life cycle costs
- Risk management

- Environment

Within these fields, there are themes or subjects that can be used. The following list is given as a suggestion, but it can be made longer by developing new criteria, inspired by the project, the stakeholders, or the client.

a) Functionality

Criteria	**engineering consultants**	**contractors**
a. noise	X	X
b. Pollution	X	X
c. Educational functionality	X	X
d. Storage capacity		X
e. Diversity and flexibility	X	X
f. Users Quality	X	
g. accommodation of functions	X	
h. functionality	X	
i. Distinctive entrepreneurship	X	X
j. Housing Quality	X	

Availability

Criteria	**engineering consultants**	**contractors**
a. date of delivery		X
b. planning	X	X
c. exclusions of the affected infrastructure	X	X
d. project planning	X	X

b) Aesthetics

Criteria	**engineering consultants**	**contractors**
a. Integration	X	
b. design	X	
c. transparent design	X	
d. green design	X	
e. natural Quality	X	
f. spatial integration	X	
g. plan quality	X	
h. spatial quality	X	
i. urban integration	X	
j. architectural quality	X	
k. user satisfaction	X	

c) Sustainability (product)

Criteria	engineering consultants	contractors
a. noise reduction	X	X
b. reduction of energy	X	X
c. CO2 reduction	X	X
d. circularity	X	X
e. sustainable use of material	X	X

d) Sustainability (process)

Criteria	engineering consultants	contractors
a. social return	(X)	X
b. co2 score on process	X	X
c. quality system	X	X
d. project PR	X	X
e. efficient demolition		X

e) Life Cycle Costs

Criteria	engineering consultants	contractors
a. operating costs, maintenance and reconstruction costs	X	
b. total cost of ownership	X	

f) Risk management

Criteria	engineering consultants	contractors
a. risk register with mitigation measures	X	X
b. project management	X	X
c. project organisation	X	X
d. geotechnical risks	X	X
e. project control	X	X
f. execution methodology		X
g. risk - opportunities dossier	X	X
h co-operation	X	X
i. feasibility	X	

g) Environment

Criteria	engineering consultants	contractors
a. communication with stakeholders	X	X
b. information	X	X
c. safety	X	X

d. hindrance	X	X
e. accessibility	X	X
f. noise reduction	X	X
g. minimisation of smell or other pollutants	X	X

Some organizations use other interpretations of quality criteria, like the professionality of the project staff, i.e. project implementation team. Part of the offer is then a description of the project team, with their members, their qualifications including references on similar size and scope projects. The way to apply this criterium, apart from references scoring, is increasingly more the use of interviews either individually or with the whole team.

The quality criteria must be clearly described in the tender dossier, so that the bidders know what the demands are, and how they will be assessed and reviewed. In other words, criteria should be accountable. It might take some time and effort to work this out. If the criterium is planning (implementation schedule), this is easy: the quicker, the higher the score. If the criterium is hindrance, it is a lot more difficult. How do you measure a reduction of hindrance?

Step 3: Choose a maximum of 4 criteria

Following the development of award criteria, it is necessary to limit the number of criteria. The first reason is the statistical effect. The more criteria, the higher the dampening effect. The effect will be that price (still one of the award criteria!) will tend to have more and more influence. We state that the maximum number should be four (without price). The second reason is money; for bidders, criteria take effort, time and thus money. The more criteria, the higher the transaction costs.

The way to choose four criteria, is a little bit subjective. If you can rank the project goals, it should be possible to rank the criteria as well. You than simply choose the highest ranked criteria.

If the project goals are equal, it is a bit more difficult. In any case, do not chose two criteria from the same field, unless you really mean to emphasize that field in the review.

If possible, try to decide about this step with everyone involved and organize a consensus meeting.

It is also possible to use the panel of experts and ask them to make the pair weighting (to compare any criterium with the rest of all criteria on the scale 1 to 10, so every expert will deliver the table giving his pair weighting). After overall calculation you will get the weighting of all criteria and you can choose the four with the highest weights.

Step 4 Attribute weights to the criteria

After you have decided about the four criteria you have to decide about their relative weights.

The first decision is about the ratio between price and quality. A lot of arguments can be given, but there is a general opinion that quality has a significant influence if price and quality are equal in weight. If MEAT (e.g. quality) is important, then the weight should be more than 50%. In other words,

if price is higher than 50%, then MEAT will not work. Ideally, price cannot be higher than 20 to 30% in relation to quality.[1]

The second decision is the relative weight between the 4 (or less) quality criteria. This is also a matter of discussion between the members of the project team involved. One should look at the project goals if they are different in importance. If they are, then the derived criteria might be different in weight as well.

The pair weighting method (described in part Step 3 above) is a proven objective method, if the expert panel is chosen in a broad and representative way.

Step 5 Test your set by performing a crash test.

The last step is a crash test. Put the score of some virtual offers in the set of criteria and see what happens;

- How big is the difference in price if a low bidder wants to win from a bidder with the highest score on quality?
- How big a financial difference is there if two bidders are almost equal?
- How much extra would you pay if the second bidder has a higher quality and the lowest price bidder doesn't win?

With this test you can get a feeling about the influence of quality related to price. If it is too expensive to award quality you can adjust the ratio between price and quality.

[1] FIDIC recommends the use of QBS in the selection of an engineering consultant. In QBS, the price is fixed and no element in the assessment.

Appendix

For the procurement of engineering services, the content design of criteria is of essential importance:

Eligibility criteria (minimal requirements for participation in the procurement procedure):

Eligibility criteria must show an objective relation to the contract item. The requirements must be adequate regarding scope and extent of the contract and to the actual risks in connection with the project. Regarding planning services there is a tendency to have excessive eligibility criteria and thus create unnecessary burdens for market access especially for SMEs.

Authorization: In case of low contract values the requirement of an authorization for the offered planning services is often sufficient as it is in most countries legally combined with minimum professional legal requirements.

Economic capacity: For proving the economic resilience, professional liability insurance is an important factor. Requirements of minimum turnovers can be misleading as the office structure of planning offices very much differ from the structure of other companies that are part of the building process. Excessive requirements can be a burden for many potential service providers with an SME structure. This can considerably reduce the intellectual competition and thus hinder perfect solutions.

Technical capacity: Most relevant is the qualification of the personnel that is active in the project. This can be proved by qualification / CPD certificates and personnel references. Additionally, it is possible to require company references. It is important that such requirements are not excessive, normally it is sufficient to ask for references with half the volume of the contract item (e.g. for planning a retirement home, references in housing are sufficient). Reference periods should be as long as possible, unrealistically short periods can considerably reduce the intellectual competition without bringing added value.

Reliability: In many cases the prove of a legal authorization – which is often bound to certain legal requirements - makes this requirement superfluous.

Engineers are very much in favour of the self-declaration as it considerably reduces the efforts for clients and contractor.

Selection criteria (for two-stage procedures to select the most suitable participants)

In contrast to eligibility criteria their evaluation range is broader. Selection criteria should be listed in order of importance, the scoring system should be made transparent. It is important to ensure an objective relation to the contract item.

Potential selection criteria:

- Additional qualifications of key personnel receive additional score points;

- Personnel references / team constellations exceeding the key personnel qualifications that are evaluated according to content-related parameters;
- Company references exceeding the eligibility references that are evaluated according to content-related parameters;
- Work samples that are evaluated by a commission according to sub-selection criteria related to the task assignment in the second stage of the procedure;
- Knowledge management e.g. shown by lecture series / publication series in connection with the contract item;
- Quality management by work samples of checklists and test criteria;
- Proposal for solution, concept;
- Continuous Professional Development.

Award criteria

Award criteria are the means to assess an offer; therefore, they have to be – in contrary to the company-related eligibility and selection criteria – contract related. Planning services as intellectual services require the use of the “most economically advantageous tender”.

This means that the quality aspects of the tender are more important than the pure price aspects. The economic efficiency of the project is essential and more important than the score points that assess the offered price.

For further explanation see the Guideline.