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TENDER EVALUATION CRITERIA IN THE PUBLIC PROCUREMENT OF WORKS

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Abstract:

The amendment to the Public Procurement Law (PPL) [7], which came into effect on 19 October 2014, introduced new principles of tender evaluation. The price may no longer be the sole criterion, unless the conditions listed in the PPL occur. The purpose of the article is to analyse the tender evaluation process in the public procurement of works in the situation where contracting authorities are obliged to apply also other criteria apart from price. Undoubtedly, it will result in a reduced number of procedures where price is the only criterion. The paper presents the results of the research illustrating the scale of this phenomenon and the way of using the new regulations by contracting authorities. The paper contains a brief description of legal bases, new principles of applying tender evaluation criteria and the present practice in this area. The article presents the results of the analysis of notices of contracts on works, published in the Public Procurement Bulletin (PPB) [2] after the amendment to the PPL. The analysis focused on the type, number and frequency of applying the criteria and on their weightings in contracts on works concerning different types of building structures. The conducted research shows that the type of the subject matter of the contract does not influence the choice of criteria. The main criteria, apart from price, include guarantee (period and conditions) and time limit for completion. The number of procedures in which price is the only criterion has decreased significantly. The research reveals that in the tender evaluation process regarding contracts on works contracting authorities take practically no account of life cycle costs and do not apply the so-called environmental criteria.

Keywords:

evaluation criteria, public procurement, works

INTRODUCTION

The tender evaluation process is often discussed in the literature. Numerous researchers have identified and analysed the criteria adopted for tender evaluation in different countries [1], [3], [6], [8], [9]. In the case of works price has always been the evaluation criterion given the highest weighting by contracting authorities. Selection criteria may differ depending on the organisation system to be adopted for a construction project, e.g. general contracting, design and build [5], [6].

The purpose of the article is to examine the above process in the public procurement of works before and after the amendment to the Public Procurement Law (PPL).

1. LEGAL BASES

Pursuant to Art. 91.1. the contracting authority selects the most advantageous tender on the basis of the tender evaluation criteria specified in the procurement documents (SIWZ in Poland, i.e. Specification of Essential Terms of the Contract). Tender evaluation criteria may include price or price and other criteria linked to the subject matter of the contract. The legislator has listed in particular quality, functionality, technical parameters, environmental, social and innovative aspects, servicing, time limit for contract completion and operating expenses. Tender evaluation criteria may not be subjective in nature, hence, they may not concern the economic operator's characteristics, and in particular its economic, technical or financial credibility. After the amendment to the Public Procurement Law (it was passed by the Polish Parliament on 25 July 2014 and came into effect on 19 October 2014) [7] the principles of tender evaluation were changed. The fundamental change consisted in making it possible to apply the price criterion as the sole criterion only in the case where the subject matter of the contract is commonly available and its quality standards are defined (Art. 91.2a of the PPL) [7]. In the case of contracting authorities belonging to the public finance sector and to other state organisational units which are not legal persons the use of price as the sole criterion makes it necessary to justify such decision in the record of the process.

When an economic operator is selected solely on the basis of the price criterion, it is necessary to provide a justification evidencing how the expenses to be incurred throughout the period of using the subject matter of the contract have been incorporated in the description thereof. The contracting authority relying solely on price as the criterion for selecting an economic operator will have to demonstrate, depending on the subject matter of performance, that, for example, the description of the subject matter of the contract, the principles of payment for contract completion or the principles of covering operating expenses, etc. have been taken into account in the assessment of the economic operator. The limitation to apply only the price criterion should not result in selecting the solution which is the cheapest one to complete, but generates high operating expenses.

2. TENDER EVALUATION CRITERIA FOR CONTRACTS ON WORKS – BEFORE THE AMENDMENT TO THE PUBLIC PROCUREMENT LAW

The authors of the publication [4] analysed 150 contract notices published in the Public Procurement Bulletin (PPB) in 2013 and 2014, the subject matter of which included works, out of which: roads – 50, schools – 50, and waste treatment plants – 50.

The lowest price approach was adopted in as many as 95% of the procedures. The type of building structure was irrelevant, because in each case the situation was similar. In only eight procedures (5%) tenders were evaluated on the basis of more than one criterion (Table 1.).

Criteria/type of waste treatment Percentage of schools Total roads building structure plants procedures 49 47 lowest price 46 142 95% price and other 3 4 8 5% 1 criteria 50 50 100% total 50 150

Table 1. Tender evaluation criteria

Source: [4]

The weighting of the price criterion in the procedures in which also the criteria other than price were applied was at the highest level in each of the examined procedures and exceeded 60% (Table 2.). The price was the dominant criterion for public contracting authorities.

Type of building structure/range	90-99%	80-89%	70-79%	60-69%	50-59%	<50%
roads	0	0	1	0	0	0
schools	2	0	1	0	0	0
waste treatment plants	1	0	2	1	0	0
total	3	0	4	1	0	0

Table 2. Price weighting in the case where multi-criteria evaluation was applied

Source: [4]

Apart from price the most frequently used criteria included guarantee (period, conditions) -3.33%, and energy consumption -2.00% (waste treatment plants). In contracts on works the application of the so-called environmental criteria (energy consumption -0.67%, operating expenses -0.67%) by contracting authorities was marginal. The exact frequency of the occurrence of respective criteria in the examined procedures is shown in Table 3.

Table 3. Frequency of the occurrence of tender evaluation criteria other than price

No.	Criterion	Frequency
1.	Guarantee (period, conditions)	5
2.	Energy consumption	3
3.	Time limit for completion	1
4.	Operating expenses	1

Source: [4]

3. TENDER EVALUATION CRITERIA FOR CONTRACTS ON WORKS – AFTER THE AMENDMENT TO THE PUBLIC PROCUREMENT LAW

3.1. GENERAL REMARKS

After the amendment to the Public Procurement Law the objective of the conducted research was to monitor the changes that occurred in the tender evaluation process in the public procurement of works.

The analysis covered 74 contract notices, published in the Public Procurement Bulletin [2] in the period from 19 October 2014 to the end of April 2015. The number of procedures was relatively low because of a short period of time after the act came into effect. Procedures differing with respect to the subject matter of the contract were selected for the analysis. The purpose of such sample selection was to assess whether the type of applied criteria varied depending on the subject matter of the contract. The research sample had the following structure: roads -21, multi-family buildings -20, waste treatment plants -10, hydraulic engineering -8, schools -15. Except for one restricted procedure, all the remaining contracts were placed using the open procedure.

3.2. PRICE CRITERION

In 74 analysed procedures only in 15% (11) of them price was the sole criterion. In the remaining procedures (85%) contracting authorities evaluated tenders by applying also the criteria other than price (Table 4.). Price as the sole criterion was most often used in the contracts whose subject matter included works related to waste treatment plants (40%). Thus, the amendment to the PPL changed the situation radically. Tenders were no longer selected exclusively on the basis of one criterion.

Table 4. Price and other criteria – number of procedures

Type of building structures	Total number of procedures	Price as the sole criterion	Percentage of procedures Price as the sole criterion [%]	Price and other criteria	Percentage of procedures Price and other criteria [%]
roads	21	5	24.0	16	76.0
multi-family buildings	20	2	10.0	18	90.0

Type of building structures	Total number of procedures	Price as the sole criterion	Percentage of procedures Price as the sole criterion [%]	Price and other criteria	Percentage of procedures Price and other criteria [%]
waste treatment plants	10	4	40.0	6	60.0
hydraulic engineering	8	0	0.0	8	100.0
schools	15	0	0.0	15	100.0
total	74	11		63	
percentage of procedures	100.0%		15.0%		85.0%

Source: own research on the basis of the PPB [2]

To verify whether tenders with the lowest price were still selected the importance of this criterion was checked in the analysed procedures. In as many as 84% of the procedures in which price was not the sole criterion its average weighting exceeded 90%, regardless of the subject matter of the contract. The lowest weighting for this criterion was 60% (Table 5.). Thence, the amendment to the act did not change the analysed tendency. Price still remains the most important criterion.

Table 5. Weighting and frequency of applying the price criterion in multi-criteria evaluation

Range	90-99%	80-89%	70-79%	60-69%	50-59%	<50%	Average weightin
roads	13	3	-	-	-	-	92.7%
multi-family buildings	15	2	-	1	-	-	90.9%
waste treatment plants	5	1	-	-	-	-	90.0%
hydraulic engineering	7	-	1	-	-	-	90.8%
schools	13	2					90.8%
total	53	8	1	1	-	-	91.0%
percentage of procedures	84%	13%	1.6%	1.6%			

Source: own research on the basis of the PPB [2]

In the examined procedures the price weighting was most often at the level of 95% and 90%. It totalled 99% (3) in three cases and 97% (1) and 96% (1) in one case each. Price still retains a significant dominance over the remaining criteria. Because of the high weighting contracting authorities did not have to justify in the record of the process their decision to rely solely on the price criterion, while, concurrently, the use of the other criterion did not affect the ranking of tenders. The lowest price criterion is convenient for contracting authorities, particularly when the correctness of selecting the most advantageous tender has to be justified.

3.3. PRICE AND OTHER TENDER EVALUATION CRITERIA

The number of criteria used for contracts on works is presented in Table 6.

Table 6. Number of criteria in procedures regarding contracts on works

Number of criteria in a procedure, including price	Number of procedures	Percentage of procedures
1	11	15%
2	61	82%
3	2	3%
4 and more	0	0%
	74	100%

Source: own research on the basis of the PPB [2]

In the analysed procedures contracting authorities made the selection on the basis of price and one additional criterion (82%), and in only two procedures three criteria were applied (3%). A higher number of criteria did not occur in the analysed procedures. In 15% of the procedures price was the sole selection criterion (Table 6). For the sake of comparison, in all public procurement contracts (services, supplies and works) mainly two criteria were used (in more than 92%), but there were also contracts with a significantly larger number of criteria, reaching even twelve tender evaluation criteria in one procedure [10]. Apart from price, contracting authorities placing contracts for works applied also other criteria, out of which the ones used most often included guarantee (almost 76%) and time limit for completion (22%). The results of the research on the frequency of applying respective criteria are presented in Table 7.

Table 7. Frequency of applying tender evaluation criteria other than price

Most frequently used criteria other than price	Number of procedures	Percentage of all procedures	Percentage of procedures in which price was not the sole criterion
guarantee/warranty	48	64.8%	76.2%
time limit for completion	14	18.9%	22.2%

Most frequently used criteria other than price	other procedures procedures		Percentage of procedures in which price was not the sole criterion
payment (maturity date)	1	1.3%	1.6%
social aspects	1	1.3%	1.6%
technical capability	1	1.3%	1.6%

Source: own research on the basis of the PPB [2]

The frequency of the occurrence of the applied criteria in a breakdown by respective types of the subject matter of the contract is shown in Table 8. It can be observed that guarantee was the most often used tender evaluation criterion (apart from price), irrespective of the type of building structure for which works were contracted. Contracting authorities sporadically used other criteria, such as, for example, payment terms or social aspects. In the analysed procedures there were no cases of applying criteria taking account of environmental aspects.

Table 8. Frequency of applying tender evaluation criteria other than price

Frequency of applying tender evaluation criteria other than price							
Criteria/ Subject matter of the contract	guarantee	time limit	payment terms	social aspects	technical capability		
roads	13	1	1		1		
multi-family buildings	13	6		1			
waste treatment plants	3	3					
hydraulic engineering	5	3					
schools	14	1					
total	48	14	1	1	1		

Source: own research on the basis of the PPB [2]

Table 9 shows the average weightings of the criteria other than price. The minimum and maximum values of weightings given to the applied criteria, in a breakdown by the type of the subject matter of the contract, are provided in parentheses.

The presented analysis shows that the largest range of values of criteria weightings could be observed in the procedures in which the subject matter of the contract included works related to multi-family buildings (1-20%), hydraulic engineering (10-30%) and schools (4-20%). It can be noted that in several cases contracting authorities used a very low weighting (even at the level of 1%), which suggests that it was done only to

avoid the necessity of providing the justification for applying price as the sole criterion. It was absolutely insignificant for the ranking of tenders.

Table 9. Weightings of tender evaluation criteria other than price

Average (m	Average (min/max) weightings of tender evaluation criteria other than price [%]						
Criteria/ Subject matter of the contract	guarantee	time limit	payment terms	social aspects	technical capability		
roads	6.9 (5/15)	10.0	10.0		10.0		
multi-family buildings	6.7 (1/20)	9.3 (1/20)		20.0			
waste treatment plants	11.7 (5/20)	8.3 (5/10)					
hydraulic engineering	4.8 (1/10)	16.7 (10/30)					
schools	9.1 (4/20)	10.0					
average weighting	7.8	10.9	10.0	20.0	10.0		

Source: own research on the basis of the PPB [2]

3.4. Contracts with the value exceeding the thresholds set by the European union

On the basis of eight notices published on the Tenders Electronic Daily (TED) website [11] in the period under study, price as the sole criterion was indicated in three of them (38%). In the remaining cases contracting authorities applied two criteria, out of which guarantee in 80% (5 notices) and time limit for completion in 20% (1 notice). The price weighting in these procedures ranged from 70% to 95% and in all cases it was higher than the weightings of other criteria. The average weighting of the price criterion was 83.4%. The average weighting of the guarantee criterion was 18.75 % (from 5% to 30%) and of the completion time limit criterion, 8%. However, as the sample size was too small, it would be difficult to draw unambiguous conclusions.

CONCLUSION

The analysis of notices placed in the Public Procurement Bulletin, conducted after the amendment to the PPL and until the end April 2015, showed that in the case of proce-

dures for awarding public procurement contracts on works the value of which did not exceed the EU threshold the percentage of notices with price as the sole criterion dropped from 95% to the level of 15%. Before the amendment, price and other criteria were applied in 5% of the procedures being below the EU threshold, whereas after the amendment their number increased to 85%. The use of the lowest price criterion is convenient for contracting authorities, and it also provides a justification for the correctness of selecting the most advantageous tender. In contracts on works the most often used criteria other than price included guarantee/warranty (period, conditions, etc.) (76%) and time limit for completion (22%).

In the analysed procedures in which evaluation was based not only on price, contracting authorities applied two tender evaluation criteria (including price) in more than 82% of notices and three criteria in 3%. A higher number of criteria was not recorded. Contracting authorities did not apply environmental criteria for tender evaluation. The application of the so-called environmental criteria or, using a broader approach, green contracts, is not mandatory pursuant to the provisions of law. However, green contracts are of special importance to the idea of sustainable development, so during the preparatory stage contracting authorities should intensify their activities conducive to the above by taking environmental aspects into account.

In several cases contracting authorities applied a very low weighting of 1%-5%. Owing to this they no longer had to justify the use of price as the sole criterion in the record of the process, while the ranking of tenders could remain unchanged.

The results of the research provide the basis for the comprehension and assessment of contracting authorities' behaviour while evaluating tenders for contracts on works in the initial period of applying the new regulations. The monitoring of this process over a longer period of time will make it possible to conduct a thorough assessment and introduce possible changes in the regulations, when contracting authorities' adverse behaviour while selecting the most advantageous tender is observed.

In the case of contracts on works a tendency can be observed similar to that applicable to the whole sector of public procurements contracts. According to the Public Procurement Office [10], the percentage of notices with price as the sole criterion decreased from 93% to the level of 31%. In public procurement contracts on works guarantee is the second most often used criterion. However, taking account of all contracts, the most often used criteria other than price include time limit for completion (29%), guarantee/warranty (period, conditions, etc.) (25%), payments (conditions, maturity dates, etc.) (10%) and quality/functionality/technical parameters (8%). In the procedures in which evaluation was based not only on price, contracting authorities applied two tender evaluation criteria in more than 92% of notices; on average 2.11 criteria were used.

REFERENCES

1. Banaitiene, N., Banaitis, A., Analysis of criteria for contractors' qualification evaluation, Technological and economic development of economy (Ukio Technologinis

- ir Ekonominis Vystymas), 12:4, 2006, 276-282, [online]. [access: 17.11.2014], Available on the Internet: http://dx.doi.org/10.1080/13928619.2006.9637754.
- 2. Biuletyn Zamówień Publicznych, [online]. [access: 20.04.2015]. Available on the Internet: www.uzp.gov.pl.
- 3. Favie, R., Abdalla, G& Maas, G. J., *The best criteria for the selection of contrators in the Dutch construction industry*, In W. Hughes (Ed.), Proceedings of the CME25: Construction Management and Economics: Past, Present and Future, Reading (UK), July 2007, p. 1-7. [online]. [access: 17.11.2014]: Available on the Internet: (http://alexandria.tue.nl/openaccess/Metis221192.pdf.
- 4. Hanák, T., Korytárova, J., Kozik, R., Radziszewska-Zielina, E., *Exploration of contractor evaluation process in the management of public works contracts*, Project management as spectrum of scientific problems in engineering and management, Military Academy of Land Forces, Wrocław 2015, p. 55-65. ISBN 978-83-63900-63-2.
- 5. Kozik, R., *Problems of the Contractors with Preparing a Tender for Works According to the Design and Build System*, Scientific Problems in Management, red. Skorupka D., Flieger M., Military Academy of Land Forces, Wrocław 2013, p. 23-32. ISBN 978-83-63900-93-9.
- 6. Salama, M.,Ab d El Aziz, H., El Sawah, H., El Samadony, A., *Investigating the criteria for Contractors' selection and bid evaluation in Egypt*, 2006 [online]. [access: 14 .11. 2014]. Dostępny w Internecie: http://www.arcom.ac.uk/-docs/proceed ings/ar2006-0531-0540 Salama et al.pdf.
- 7. Ustawa z dnia 29 stycznia 2004 r. *Prawo zamówień publicznych* (Dz. U. z 2013 r. 907, 984, 1047 i 1473, z 2014 r. poz. 423, 768, 811, 915, 1146 i 1232 oraz z 2015 r. poz. 349).
- 8. Wong, C. H., Holt, G. D., Cooper, P. A., Lowest price or value? Investigation of UK construction clients' tender selection process, Construction Management & Economics, Vol. 18, Issue 7, 2000, p. 767–774.
- 9. Wong, C. H., Holt, G. D., Harris, P., *Multi-criteria selection or lowest price? Investigation of UK construction clients' tender evaluation preferences*, Engineering Construction & Architectural, Management, Vol. 8, Issue 4, 2001, p. 257–271.
- 10. [online]. [access: 20.04.2015]. Available on the Internet: http://www.uzp.gov.pl/cmsws/page/?D;3088.
- 11. [online]. [access: 20.04.201] Available on the Internet: http://ted.europa.eu /TED /search/searchResult.do Tenders Electronic Daily.

BIOGRAPHICAL NOTE

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