



ABNORMALLY LOW TENDERS IN WORKS PROCUREMENT PROCEDURES. CURRENT APPROACHES AND TECHNOLOGIES FOR IMPROVEMENT

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INTRODUCTION

The public procurement system in the Republic of Moldova is based on a set of regulatory provisions stipulated by national legislation.

The primary legislation for the public procurement system consists of the following:

- **Law No. 131 of 03.07.2015** on Public Procurement;
- **Law No 74 of 21.05.2020** on procurement in the energy, water, transport and postal services sectors;
- **Law No 121 of 05.07.2018** on works concessions and concessions of services.

At the same time, a set of normative documents adopted by Government Decisions or Orders of the Ministry of Finance have been elaborated in addition for the effective transposition of the primary legislation.

According to the EU public procurement regulatory acts, the determination of an abnormally low bid is not clearly defined in Directive No. 2014/24/EU. However, it is generally accepted that this concept is treated as a situation where the price offered by the economic operator raises suspicions as to its economic sustainability and whether the work can be executed with this price.

According to **Art. 69, para. (1)** of Directive No 2014/24/EU - In the case of abnormally low tenders, contracting authorities shall require economic operators to explain the price or costs proposed in the tender, if the tenders appear to be abnormally low in relation to the works, products or services concerned.

With reference to abnormally low tenders, **Law no. 131/2015** provides in **Art. 70, para. (1)** as follows:

An abnormally low bid may be an offer to sell goods, execute works or provide services at a significantly lower price compared to the bids of other bidders or in relation to the goods, works or services to be supplied, executed or provided in a situation where the bidder fails to demonstrate its access to a particular technology or more advantageous market conditions that would allow it to offer such a low bid price.

In the case of public works procurement, a tender is **significantly lower in comparison with the tenders of other tenderers** or in relation to the works to be carried out if the price tendered **represents less than 85% of the value of the works**, calculated by the contracting authority in the manner laid down.

Therefore, in the process of evaluating the tenders submitted by economic operators, the contracting authority is **obliged** to provide the economic operator with the possibility of justifying the abnormally low price. Where a tender appears to be abnormally low in relation to what is to be supplied, executed or rendered, the contracting authority is required to ask the tenderer, in writing and before taking a decision to reject the tender, for details and clarifications which it considers significant in relation to the tender, and to verify the replies justifying the price.

The contracting authority is obliged to take into account the justifications received from the tenderer, in particular those concerning:

- a) the economic rationale for the price formation, related to the production process, the methods of execution used or the services rendered;
- b) the technical solutions adopted and/or any particularly favorable conditions from which the tenderer benefits for the supply of the goods, execution of the works or provision of the services;
- c) the originality of the tender from the point of view of meeting all the requirements set out in the specifications;
- d) compliance with the provisions on employment protection and working conditions applicable to the execution of the work, the provision of the service or the supply of goods;
- e) the possibility of the tenderer benefiting from State aid.

At the same time, according to the **Government Decision no. 638 of 26.08.2020** for the approval of the *Regulation on public works procurement*, **item 132** specifies that the contracting authority shall, in the case of a tender, the value of which constitutes less than 85% of the estimated value of the works, carry out the control of the calculation of the price elements and the compliance by the tenderer with the technical requirements stipulated in the tender specifications

In the case of sectoral procurement, governed by **Law No. 74 of 21.05.2020**, Art. 78, para. (1) Abnormally low bid may be the bid for the sale of goods, execution of works or provision of services **at a significantly lower price compared to the bids of other bidders** or in relation to the goods, works or services to be supplied, executed or provided in the situation where the bidder fails to demonstrate its access to a particular technology or more advantageous market conditions that would allow it to offer such a low bid price.

CASE STUDY

In this case study it is proposed to evaluate price formation in construction for procurement procedures, in which abnormally low bids were submitted. Randomly 10 procurement procedures were selected, as selection criteria served, procedures in which **5 or more bids** were submitted by economic operators, and the subject of the procurement is **current repair works or capital construction works**. The public works procurement procedures are presented in the table below:

No.	Subject of Purchase	Value Estimated value	Offer awarded	VA/VE ratio	Type of procedure	Number of bidders
1	Current repair works of Newborn Pathology Ward No 1	4 827 625,74	3 374 726,50	70%	LD	9
2	Repair works of the sarpana roof, thermal insulation of the fasades and replacement of the windows at the gymnasium M. Snegur s. Trifănești, r. Florești	4 519 200,00	2 987 279,84	66%	LD	8

3	Replanning of the "G" block of the kindergarten in Ecaterinovca village, Cimislia district	3 060 440,00	2 400 000,00	78%	LD	8
4	Construction works of the for Family Doctors in Recea village, r. Strășeni	4 639 000,00	3 687 097,30	79%	LD	7
5	Repair works at IPLT "Gaudeamus", Petru Zadnipru str. 14/4, or. Chisinau	3 485 391,00	2 433 566,80	70%	LD	6
6	Repair works in LTPA E. Alistar under DETS Botanica	5 223 137,28	3 856 456,00	74%	LD	6
7	Reorganization and repair library of CEMF "Raisa Pacalo"	3 252 620,00	1 862 967,41	57%	LD	6
8	Procurement of ongoing repair works of the clinical diagnostic laboratory, 2nd floor, CMF-5 building, I.L.Caragiale str. 1, mun. Chisinau	2 644 416,00	1 774 674,97	67%	LD	5
9	Capital repair works on the roof of the Polyclinic building Raionale Cimislia (Health Center)	1 502 354,00	1 099 607,06	73%	COP	16
10	Repair work on sports hall	1 666 666,00	926 018,24	56%	COP	15

In **all the 10 case studies**, the construction workers' salary, transportation expenses, overhead expenses, and the estimate benefit were evaluated. These values were extracted from the estimate documentation (Form No. 7 - Local Estimate; Form No. 3 - Resource Schedule; Form No. 5 - Unit Price List) submitted by the economic operator, whose bid was the winning bid.

No.	Subject of Purchase	Salary	TC	CR	BD
1	Current repair works of the Pathology ward newborns no. 1	36,06	2,0%	2%	2%
2	Repair works of the sarpanta roof, thermal insulation of the fasades and replacement of the window frames at gymnasium M. Snegur s. Trifănești, r. Florești	50	2,0%	10,50%	2%
3	Replanning of the "G" block of the kindergarten in Ecaterinovca village, Cimislia district	51,5	7,0%	6%	3%
4	Construction works of the building of the Medical Doctors Family Medicine in Recea village, r. Strășeni	64	4,0%	14%	6%
5	Repair works at IPLT "Gaudeamus", Petru Petru str. Zadnipru 14/4, or. Chisinau	36,45	3,5%	4%	2%
6	Repair works at LTPA E. Alistar under DETS Botanica	64,84	3,0%	10%	6%
7	Reorganization and repair of the CEMF library "Raisa Pacalo" Library	49,58	3,0%	4%	3%
8	Purchase of routine repair works for diagnostic clinical laboratory, 2nd floor, in the premises CMF-5 building, I.L.Caragiale str. 1, mun. Chisinau	50,9	3,0%	8%	3%

9	Capital repair works on the roof of the building Cimislia District Polyclinic (Health Center)	47	1,0%	1,50%	2%
10	Repairs to sports hall	42	3,0%	2%	1%
	Average	49,23	3,2%	6,2%	3,0%

These values were then compared with the recommended values used in the the estimated cost documentation prepared by the contracting authority.

Value	Share of value in ^{AC1} estimates	Share of value in tender estimates of EO in case study
Wages for construction workers	84.97 lei/h·m ²	49.23 lei/h·man-hour
Social insurance	24%	24%
Transportation costs	A. 7% B. 8% C. 10% D. 2% E. 4% F. Catalog no. 13 (roads)	3,2%
Expenditure on the Board	A. 14.5% B. 76% C. 60%	A. 6,2% B. - C. -
Benefit of Deviz	6%	3,0%

From the evaluation of the case study data, it can be seen that **there is a significant difference between the value share in the estimated estimates prepared by the contracting authorities and the tender estimates of the economic operators** awarded the contract. The most significant differences are recorded in the case of the wages of the construction workers, which are approximately **40% lower** in the economic operators' estimates than in the estimated estimates, in the case of transportation costs, which are approximately **50% lower** in the economic operators' estimates than in the estimated estimates, and in the case of overheads, which are approximately **50% lower** in the economic operators' estimates than in the estimated estimates.

Thus these values, which are used in the tender estimates, are one reason why the tenders of these economic operators are considered abnormally low. Another reason is the cost materials of construction and cost for utilization of equipment/mechanisms/utilities in the tender estimates, which cannot be compared due to the absence of such data in the *above* public procurement procedures.

¹according to the Informative-Normative Letter No.10/1-0086 on the determination of the value of construction objects starting May 1, 2018 of the Ministry of Economy and Infrastructure of the Republic of Moldova

²according to CP Amendment L.01.02:2012/A2:2022

However, in view of these considerations, **a new approach** to the determination of abnormally low bids **is needed**. Given that in the public procurement procedures, which were the subject of this case study, a number of bidders equal to or greater than 5 economic operators were registered, the method proposed by the EBRD in the *"Guide to the determination of abnormally low tenders for works procurement procedures"*³ is proposed for use.

This guide states that it is very difficult, if not impossible, to define abnormally low tenders covering all possible scenarios. In the order of identifying abnormally low bids, it is proposed that if **5 or more bids** have been submitted, *the relative method* should be used. At the same time, this method can be used even if only 3 bids have been submitted, taking into account that in this case the results of the relative method are less reliable.

Thus, the guide specifies the mathematical formulas to be used in identifying the bids that fall in the **"abnormally low bids zone"** by the *relative method*. The methodology to be followed consists in calculating the arithmetic mean and the standard deviation of the bids submitted. The difference between the arithmetic mean and the standard deviation is considered to be the threshold for the **'abnormally low bid area'**. Tenders that are below this threshold are therefore identified as abnormally low.

Thus, on the basis of the procurement procedures that have been selected *above*, we are going to identify the threshold for abnormally low tenders using the **relative method**. Such an example is given in the table below:

No.	Procurement Subject	Value of bids
3	Re-planning of block "G" of the kindergarten in s.Ecaterinovca, r. Cimislia	
	AC&Group S	2 349 247,74
	Softconstruct	2 400 000,00
	The Mason's Art	2 415 834,00
	"APS Service Grup	2 541 622,75
	Vig House	2 627 879,21
	S.C.Cimtermic	2 651 670,37
	Edif-Constr	2 799 942,00
	ALARCON GROUP	3 020 000,00
	Estimated value	3 060 440,00
	Arithmetic average	2 600 774,51
	Standard deviation	226 785,23
	Threshold for abnormally low tenders	2 373 989,27
	Absolute method specified in Law 131/2015	85%
	Relative method (<i>approach proposed by the author</i>)	80%

³[The EBRD Guidance - Assessment of Abnormally Low Tenders for Works Contracts, August 2019](#)

Thus for all the ten procedures that were examined, we obtain the following results from the table below:

No.	Subject of Procurement	Value estimated	Average arithmetic	Standard deviation	Abnormal bids threshold low	method absolute	method method
1	Repair works of the Pathology No 1	4 827 625,74	3 924 680,45	361 271,93	3 563 408,51	85%	74%
2	Repair works of the sarpana roof, thermal insulation of the fasades and replacement of the windows and shutters at M. Snegur Gymnasium, s. Trifănești, r. Florești	4 519 200,00	3 796 787,83	560 637,27	3 236 150,56	85%	72%
3	Replanning of "G" block of kindergarten in Ecaterinovca village, Cimislia district	3 060 440,00	2 600 774,51	226 785,23	2 373 989,27	85%	78%
4	Construction works of the Family Doctor's building in Recea village, r. Strășeni	4 639 000,00	3 979 961,50	267 348,63	3 712 612,87	85%	80%
5	Repair works at IPLT "Gaudeamus", Petru Zadnipro 14/4, or. Chisinau	3 485 391,00	3 134 127,02	554 258,85	2 579 868,17	85%	74%
6	Repair works in LTPA E. Alistar under DETS Botanica	5 223 137,28	4 036 812,22	528 893,57	3 507 918,65	85%	67%
7	Reorganization and repair of the library of CEMF "Raisa Pacalo"	3 252 620,00	2 207 519,25	433 025,73	1 774 493,52	85%	55%
8	Purchase of routine repair works for diagnostic clinical laboratory, 2nd floor, CMF-5 building, I.L.Caragiale str. 1, mun. Chisinau	2 644 416,00	1 974 084,73	212 315,99	1 761 768,74	85%	67%
9	Capital repair works on the roof of the Cimislia District Polyclinic building (Health Center)	1 502 354,00	1 247 900,11	126 547,78	1 121 352,32	85%	75%
10	Repair works on the gym	1 666 666,00	1 149 048,75	181 722,74	967 326,00	85%	58%

The following aspects can therefore be observed in the works procurement procedures that were examined:

- In **9 out of 10 procedures**, all tenders that were submitted by the economic operators are lower than the estimated value calculated by the contracting authority;
- In **all ten procedures** the threshold for abnormally low tenders is **lower** than the conventional value specified in the legislation, which states that abnormally low

is considered to be abnormally low when "*the price tendered represents less than 85% of the value of the works, calculated by the contracting authority in the manner established*";

- If the *relative method* had been used to determine abnormally low tenders, in **5 out of 10 cases** they would not represent an abnormally low tender determined according to the *absolute method*.

FINAL CONCLUSIONS AND RECOMMENDATIONS

The identification of abnormally low tenders on the basis of the absolute method alone (i.e. that the price tendered is less than 85% of the value of the works, calculated by the contracting authority in the manner established) is not always the most accurate method. The case study demonstrated that using the relative method is more reliable in identifying abnormally low tenders.

In most cases of works procurement procedures, the award criterion used is the lowest price, which creates certain risks for the contracting authority if abnormally low tenders have been proposed. Therefore, in order to allow contracting authorities to select an economic operator with sufficient capacities, it is necessary to use another award criterion, such as best price-quality or best cost-quality.

For many works contracts, the quality of the design and cost estimate documentation is considered to be poor. This was found by analyzing the reports submitted by contracting authorities to the GPA on contract amendments, where the most frequent reasons for amendments were errors or omissions in the design and cost estimate documentation. In this case the design organizations do not exercise due diligence in the detailed preparation of tenders so as to minimize the risks of unforeseen additional works during the course of the contracts.

The Moldovan building regulations, codes of practice and costing rules in the field of "Construction Economics" are outdated and need to be updated. This is evidenced by the discrepancy in the use of the amounts recommended for the preparation of the estimate documentation by the contracting authorities and the estimates offered by the economic operators. In some cases the amounts used differ by about 50% more in the estimates than in the tender estimates. The discretion left to the economic operator is quite high and the risks involved may lead to failure to meet contractual commitments. At the same time, a number of the tender specifications contain consumption standards, which are either outdated due to constantly developing technologies or because some of the standards for the manufacture of construction materials have been changed from Soviet to European standards.

The following **RECOMMENDATIONS** are proposed as a result of the research of the current situation in the field of public procurement:

1. **Procurement of design services from design firms to be carried out *exclusively* on the basis of the award criterion: best value for money.** Therefore, amendments to the public procurement legislation are necessary, namely the amendment of **Article 26** of Law no. 131/2015 by adding a new paragraph:

*"(6)¹ For the purposes of para. (3), lit. c), for public procurement of services concerning intellectual activities, **the award criterion of best value for money shall be used exclusively**"*

2. **Modification of the quality-price award criterion for works procurement.** It is recommended to amend **Article 26, para. (12), letter b)** of Law no. 131/2015, by **increasing the weighting of quality criteria** when using the award criterion best value for money. Thus, it is proposed that the minimum weight that the price element has in the award criterion of the public procurement contract be decreased from 80% to 60%. Thus point b) is to be worded as follows:

"b) for public works contracts - 60%"

3. **Update the formula for identifying bids submitted as abnormally low bids.** Given that **Article 70** of Law No. 131/2015 stipulates that abnormally low bids for works represent less than 85% of the value of the works, as calculated by the contracting authority, it is proposed to add the following to Article 70, paragraph (2):

*"In the case of public works procurement, a tender is significantly lower if **the economic operator has offered a price which is at least 15% lower than the arithmetical average of the prices offered by all tenderers, except for the tender with the lowest price** or in relation to the works to be executed if the price offered represents less than 85% of the value of the works, calculated by the contracting authority in the manner laid down."*

4. **Establishing the minimum amount of construction workers' wages used by economic operators when drawing up tender estimates.** It is recommended to amend **CP L.01.02:2012 "Instructions for determining the cost of the estimate for construction wages"** in order to apply a **minimum amount of construction workers' wages** in the bids of economic operators. This amount is to be related to the average wage in the construction branch reported by the National Bureau of Statistics. For example, the average gross monthly gross salary in the first quarter of 2023 in the construction industry is 9 780.5 MDL, which means that the bids of economic operators will include a minimum amount of construction workers' wages of **57.87 lei/man-h** (at a work schedule of 169 hours/month). This change will result in a uniform treatment in determining the amount of construction workers' wages by economic operators. Another advantage is that this amendment will increase the level of wages for construction

construction workers and will encourage the exclusion of "*undeclared work*", while the budget for social and health insurance will be supplemented.

5. **Increase the capacity of contracting authorities in works procurement.** The organization of training courses/seminars in the preparation of tender documentation and the implementation of works contracts will facilitate the process of works procurement procedures from the planning stage to the stage of acceptance on completion/final acceptance. During these information sessions, particular attention should be paid to issues frequently encountered in works execution procedures, including how to identify and evaluate abnormally low tenders.

6. **Updating the standard documentation for public works procurement.** It is recommended that this documentation be updated, on the grounds that it contains several shortcomings and requires improvements. Here are some examples:

- a. Lack of a form regarding the financial proposal to be submitted by the contractor.
- b. Indication of how the time schedule for carrying out the works is drawn up, since in many cases it is presented in general terms and is a mere formality. It should also include the resources used (number of workers, number of hours, machinery, etc.), as a result of which the necessary checks can be made as to whether the economic operator will be able to carry out the work within the time indicated.
- c. Updating the contractual provisions, following the ^{FIDIC}4 contract model

⁴The FIDIC contracts are standard contracts in the field of construction and installations, used as reference models internationally. They were drawn up by the International Federation of Consulting Engineers (hence the acronym FIDIC - Fédération Internationale Des Ingénieurs-Conseils), founded in 1915 by three European countries (Belgium, France and Switzerland).