

## **ASSESSING PUBLIC WORKS PROCUREMENT IN THE CZECH REPUBLIC'S OVER-LIMIT REGIME: SURVEY RESULTS AND RECOMMENDATIONS FOR CONTRACTING AUTHORITIES**

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### **Abstract**

This article elucidates the findings of a research study on public works procurement within the over-limit regime in the Czech Republic. A comprehensive survey, conducted in May 2023, provides a panoramic view of the current procurement landscape, encompassing aspects such as procurement methods, financing sources, cost considerations, and time allocation.

The study uncovers significant trends and patterns in the procurement process, offering an in-depth understanding of prevalent practices and challenges in the field. It further explores the complexities of procurement method selection, tender document preparation, bidder communication, and appeal handling.

The survey results highlight that the Best Value Approach (BVA) can enhance the quality, efficiency, and transparency of the procurement process and assist organizations in selecting contractors that provide the best overall value for their projects. However, some respondents expressed concerns about the potential complexity and time-consuming nature of implementing BVA. Despite these concerns, the benefits of BVA appear to outweigh the challenges for organizations willing to invest the necessary time and effort.

Drawing on these findings, the article presents practical recommendations for public purchasers, aiming to boost the efficiency and effectiveness of the procurement process and contribute to the overall enhancement of public works procurement in the Czech Republic. The insights and recommendations offered in this study are anticipated to serve as a valuable resource for policymakers, practitioners, and researchers in the field of public procurement, particularly in relation to the application of the Best Value Approach.

**Keywords:** public procurement, evaluation, public bid, public works procurement, contracting authority, Best Value Approach

## **1. INTRODUCTION**

Public procurement for construction works is a process in which the public sector, i.e. public-law institutions, awards construction contracts to private entities through a legally prescribed procedure – a

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procurement process [1]. The specifics of public procurement for construction works vary from country to country and region to region, but several general aspects usually apply.

Public procurement for construction works is typically awarded through a competitive process. Interested parties are required to submit bids, which are evaluated based on various criteria, such as price, quality, delivery timelines, and more [2]. The most commonly used types of competitive procedures are open and restricted [3].

The process of awarding public procurement contracts for construction works is regulated by legal provisions aimed at ensuring transparency and fair access for all participants. Information about the procurement process, project specifications, and requirements are transparently published to attract as many interested parties as possible [4].

When awarding public procurement contracts for construction works, detailed technical specifications and requirements are established and must be met. Interested parties must provide all required documentation, including plans, budgets, reference projects, certificates, and more [5]. To participate in a public procurement contract for construction works, suppliers are required to demonstrate qualifications and the ability to carry out the public contract. This may include presenting professional certifications, references to similar completed projects, financial capability, and other requirements set by the contracting authority [6].

Contracting authorities for public procurement contracts for construction works establish clearly defined deadlines for bid submissions, project execution, and compliance with quality standards. It is a standard practice that suppliers must provide ongoing information about the project's progress and the fulfilment of agreed-upon specifications.

Public procurement contracts for construction works are financed from public budgets. Contracting authorities are obliged to have a clear financial plan and funding sources. Payments to suppliers are usually made upon achieving specific project milestones or phases [7].

Each specific public procurement contract for construction works is unique in terms of cost, technical aspects, local conditions, and more. Construction works are always carried out according to the individual requirements of the client or contracting authority, which may include factors influenced by local conditions, such as foundation conditions, transportation demands, local capacities, and supply infrastructure [8], all of which have a significant impact on time and costs. Specific site facilities, site lighting at night, lighting restrictions for night-time peace, affecting time and costs, are required.

The estimated value of a construction contract is often different from the bid prices because the pricing for awarding the public contract is prepared by a designer based on general valuation data (average prices, reference prices, indicative prices). In contrast, bidders include real specifics when forming their bid price [9]. The difference between bid prices and the designer's price lies in the fact that the contractor calculates the price, while the designer uses available valuation data. The reason for this difference may be the low quality of the valuation data used by the designer when preparing the control budget for the contracting authority or when determining the estimated value of the public procurement contract for construction works. These data may not correspond to the current market rates for construction work. They represent average unit prices for average construction site conditions. The contractor may achieve lower material costs, quantity discounts, lower labour costs, lower consumption of time compared to "price list items", lower machine costs (internal rates of machine hours, which are lower than those in the calculation software), lower overhead costs, and more. A well-prepared control budget that takes local conditions and the construction schedule into account is highly recommended.

When the contracting authority proceeds with the award of a public contract for construction works, it is necessary to incorporate the following aspects into the process and subsequent decision-making:

- The decision regarding the form of awarding the public contract, whether as design-build or for project works and subsequent construction works [10].
- Defining spatial parameters, particularly derived from land, land-use planning, the nature of future utilization, and so forth.
- Estimating the costs of preparing project documentation, conducting exploratory work, and executing construction [11].
- Ensuring the provision of project documentation.
- Time parameters, including establishing the construction period, completion date, and commissioning date, in line with administrative deadlines (approval of various stages of project documentation), as well as conducting cost control when a significant discrepancy exists between the estimated volume of the public contract and the most advantageous offer (for construction projects, operational sets) [12] [13].

In case that contracts are financed by European union funds, the specific mandatory procedures must be followed according to individual programs. The evaluation of bids represents one of the most crucial phases in the procurement process [14]. Contracting authorities must establish a method for evaluating bids based on the most advantageous ratio of bid price and quality, the most advantageous ratio of life cycle costs and quality, the lowest bid price, or the lowest life cycle costs [15]. The selection of evaluation criteria is at the discretion of the contracting authority, considering the specific nature of the particular public contract, such as the type and scope of the public contract, among others.

Methods applicable for bid evaluation in public contracts are primarily divided into two fundamental categories: methods utilizing partial evaluation functions and their subsequent weighted averaging, and methods employing the assessment of the influence of partial non-monetary criteria. Within these categories, basic types of evaluation algorithms or methods are illustrated, and to facilitate a comparison of evaluation methods, graphs of partial evaluation functions for one partial evaluation criterion are utilized [16].

In recent years, a paradigm shift has been observed in the field of public procurement, with the advent of the 'Best Value' method. Dean T. Kashiwagi [17] is a prominent figure in the Best Value Approach in public procurement. His scholarly contributions focus on effective project management and contract evaluation methodologies. His works serve as comprehensive guides on executing supplier selection based on performance criteria and assessing their capability to deliver quality results, underscoring the significance of leadership for project success. An essential aspect of the Best Value method is the possibility of utilizing preliminary market consultation. This allows contractors and potential suppliers to transparently clarify individual parts of the public contract. Preliminary market consultations provide public contractors with the opportunity to select a bidder if they clearly qualitatively surpass others, and allows bidders to show what they can do. If neither side takes advantage of this, they remain at the lowest price, which would be unfortunate.

This innovative approach has been successfully adopted across numerous European nations, with the Netherlands leading the charge [18]. The implementation of the Best Value method has resulted in the attraction of a multitude of experienced suppliers who, under the traditional lowest bid price criterion, would have been overlooked. Consequently, this has facilitated the selection of high-quality suppliers, expediting project preparation and minimizing additional work [19]. The Best Value method is an innovative approach to bid quality evaluation, with extensive applicability across public contracts for services, supplies, or construction work. In this method, the weightage of the price offer is approximately 30 %. The qualitative evaluation, bearing a weightage of 70 %, focuses on the level of expertise, risk assessment, and added value. An integral component of this method is an interview with key team members, which can carry a weightage between 20-30 %, equivalent to the price. This method

provides public contractors with the opportunity to select a bidder who evidently surpasses others in qualitative aspects, and allows bidders to demonstrate their capabilities. This method is particularly conducive to the introduction of new innovative approaches and technologies.

Compared to the Czech or Slovak Republic, Western European countries do not predominantly award public contracts based on the lowest price. The best price does not necessarily equate to the best quality [20]. However, in the Czech Republic, the focus is often primarily on the price, with execution being secondary [21]. Hanak, Marovic, and Drozdova's [22] research addresses this issue, they collected the opinions, experiences, and practices of contractors through a questionnaire survey, and the data were evaluated using statistical methods. Their findings revealed that Czech contractors primarily base their multi-criteria bidding strategy on cost-oriented pricing while considering various aspects such as risks and the attractiveness of the tender in the context of Czech public construction procurement [23].

Competitions solely based on the lowest bid price as the evaluation criterion are not always effective [24]. While cost-saving is often cited as a benefit in this context, it frequently comes at the expense of the quality of work done. A classic example is the underestimation of construction work prices, which eventually become expensive due to inevitable additional work [25]. The Best Value method is a means to circumvent these additional costs.

The Most Economically Advantageous Tender (MEAT) approach in public procurement is emphasizing a blend of bid price and quality. This method necessitates crucial decisions on quality dimensions and their evaluation. The term "quality" encapsulates the outcome of a weighted multi-criteria analysis, leading to a definitive evaluation of each bid [26] [27] [28].

Love, Skitmore, and Earl [29] explore the selection of the optimal procurement method from the perspectives of both clients and project participants. Their research suggests that a straightforward set of criteria is generally sufficient for procurement path selection, with a reasonable consensus on the appropriate weighting for each path. Interestingly, they found that similar clients do not necessarily have identical procurement needs.

Lenderink, B., Boes, J., Halman, J. I. M., Voordijk, H., & Dorée [30] developed an innovation-encouraging procurement typology based on a literature review and multiple case studies. They also provided a guideline for public clients to select an appropriate procurement strategy for their innovation projects and programmes.

Zhao's et al. [31] research aims to identify existing procurement system criteria and the means to identify these criteria. Key findings include: Procurement System Criteria have evolved to align with the promotion of emerging procurement systems in the construction industry; research topics have been shifting towards more complex areas; and challenges in identifying criteria in practice have been identified.

### **1.1 Research goal**

Firstly, the study aims to gather the most pertinent information concerning the present state of public works procurement in the over-limit regime in the Czech Republic. This objective entails a thorough analysis of current procurement practices, regulations, and their influence on the efficiency and effectiveness of public works projects.

Secondly, the research seeks to identify key trends, relationships, and dependencies among procurers of public works contracts in the construction sector. This involves an in-depth examination of procurement processes, contract management, and the role of various stakeholders in the procurement process. The goal is to comprehend the dynamics of the procurement process and its impact on the outcomes of public works projects.

Thirdly, the study intends to pinpoint problematic aspects of setting evaluation criteria in public contracts for construction works in the Czech Republic. This will involve a critical analysis of existing evaluation criteria and their impact on the selection of suppliers for public works contracts.

The research should provide a detailed understanding of the current state of public works contracts in the construction sector in the Czech Republic. This should assist procurers, suppliers, and regulators in better understanding the challenges and opportunities in this area. Based on the research findings, practical recommendations will be formulated for procurers of public contracts in the construction sector. These recommendations should help improve the practice of awarding public contracts and contribute to better fulfilment of public contracts. The research will also contribute to the academic community by providing new insights and perspectives in the field of public works contracts in the construction sector. This should help expand the existing literature and provide a foundation for further research in this area.

### **1.2 Hypotheses**

The use of qualitative criteria in public procurement leads to the selection of contractors that offer the best overall value, not just the lowest price, thereby enhancing the quality of project outcomes and improving the efficiency and transparency of the procurement process.

## **2. METHODOLOGY**

This scientific study employs a comprehensive methodology to investigate the procurement of public works in the construction sector in the Czech Republic. The methodology is designed to capture a holistic understanding of the procurement process and is grounded in the research objectives.

The research process begins with a thorough review of primary literary sources, current legal norms, and interpretive guidelines. This review provides a solid foundation for understanding the current state of public works procurement.

A research questionnaire is then designed to gather the most relevant information. The questionnaire is pilot-tested with a select group of respondents and refined based on the feedback received. The questions are clear, concise, and directly related to the research objectives, covering aspects such as procurement methods, sources of financing, cost considerations, and time allocation.

To ensure a representative sample, a stratified selection method is used, focusing on procurers of public works contracts in the construction sector. The data collection process is carried out efficiently and accurately using the Survio application. The questionnaires are distributed electronically to maximize response rates and adhere to a standardized procedure, enabling the comparison of results.

Once the data is collected, it is interpreted in light of the research objectives and benchmarked against current industry trends and standards. The primary goal of this analysis is to identify key trends, relationships, and dependencies among variables. Practical recommendations are then formulated based on this interpretation.

The survey, conducted in May 2023, was distributed through various channels such as email, online platforms, or postal mail to reach a wider audience and increase the response rate. The responses were analysed using statistical methods to identify trends, patterns, and correlations. This analysis provides insights into the current landscape of public works procurement and informs the practical recommendations made in the study.

All respondents were assured of their anonymity and the confidentiality of their responses. They were informed about the purpose of the study and their voluntary participation. Overall, the methodology of this study is designed to obtain the most pertinent information regarding the procurement of public works in the field of construction in the Czech Republic, with a strong emphasis on ethical

considerations. All data was anonymized and used solely for the purpose of this research. This rigorous approach ensures the reliability and validity of the research findings.

### 3. RESULTS

The aim of the questionnaire survey was to obtain information on the current state of public works procurement in the over-limit regime in the Czech Republic. The questionnaire was sent out in May 2023 to contracting organisations from different sectors of the public sector. A total of 27 responses were received, representing a response rate of 44.3 %. This questionnaire survey conducted in May 2023 provided useful information on the state of public works procurement in the Czech Republic.

Based on the data, contracting authorities are predominantly public institutions that carry out construction works as part of their core activities. This finding aligns with expectations since public contracts for construction works often concern infrastructure projects such as roads, bridges, schools, and hospitals.

Construction work contracts are most frequently awarded through open procedures, followed by competitive procedures with a prior notice and negotiated procedures with publication. This result is also in line with expectations upon literature study [32] [33], as open procedures are considered the most transparent and non-discriminatory method of awarding contracts.

The primary source of funding for construction work contracts is a state budget. This result is a consequence of the fact that public administration is the primary investor in infrastructure projects in the Czech Republic. Contracting authorities handle the administration of procurement procedures either using their in-house resources or with the assistance of external support. This result is attributed to the cost and complexity of the public procurement process, which demands expertise and experience.

The average cost of conducting procurement procedures for a typical construction work contract falls within the range of tens of thousands of Czech crowns, depending on the complexity and value of the contract.

The average preparation time for procurement procedures for a typical construction work contract is 30 days, with the duration depending on the complexity and value of the specific contract.

The number of bidders participating in procurement procedures for a typical construction work contract ranges from four to six, with this variability being contingent on the complexity and value of the contract. Interest from bidders in participating in procurement procedures for construction work remains stable over the last three years, reflecting the relative stability of the construction market in the Czech Republic.

The number of disqualified or withdrawn participants in a typical construction work contract ranges from one to three, and this variability is dependent on the complexity and value of the contract.

The main reasons for disqualification or withdrawal of participants in procurement procedures are non-compliance with qualification requirements and incurable errors or pricing mistakes in the tender part of the bid. This situation results from the obligation of the contracting authority to exclude participants who do not meet the qualification requirements or who make inadmissible errors or mistakes in the pricing section of the bid.

The average duration of a procurement procedure, from its initiation to the award of a public contract (signing of the contract), for a typical construction work contract is sixty days, with the duration being dependent on the complexity and value of the contract.

The deadline for submitting bids in a procurement procedure is, on average, extended by 15 days due to the provision of additional information to bidders. This result arises from the obligation of the contracting authority to provide bidders with the opportunity to familiarize themselves with information about the contract and ask questions.

In 14 % of typical construction work contracts, there is a submission of a request for the review of the contracting authority's decision. This result is due to the right of participants to request a review of the contracting authority's decision if they believe the authority has acted in violation of the law on public procurement.

Regarding overview of the respondents' experiences regarding the weight distribution of the survey sought to explore the respondents' experiences concerning the balance between qualitative and price criteria in public procurement. Specifically, it questioned whether the respondents had been involved in a public procurement process where the emphasis on qualitative criteria surpassed 50 %, while the importance of the price criterion was less than 50 %. Out of the 27 respondents, as Table 1 shows, 11 (40.7 %) affirmed their experience with such a scenario, while 16 (59.3 %) negated. These results indicate that a substantial segment (40.7 %) of the respondents have participated in public procurement contracts where qualitative criteria held more than 50 % weightage, overshadowing the price criteria. This finding underscores the existence of procurement practices that give precedence to qualitative factors over price considerations. However, it's crucial to highlight that the majority of respondents (59.3 %) have not experienced such contracts, suggesting a significant dependence on price as the primary determinant in public procurement.

Table 1. Overview of the respondents' experiences regarding the weight distribution of qualitative and price criteria in public procurement

Response	Number of Respondents	Percentage
Experienced	11	40.7 %
No experience	16	59.3 %

As regards qualitative criteria used in public procurement presented in Table 2, the most commonly used qualitative criteria in public procurement are confirmed as experience of the team members with a similar project (74.1 %), composition of the contractor's team (59.3 %), and length of practice of the team members (25.9 %). It's interesting to note that some respondents mentioned using no qualitative criteria in their evaluation process, while others reported using criteria such as shortening the delivery time, proposal for warranty period, and assessment of documents submitted by the contractor.

Table 2. Qualitative criteria used in public procurement

Qualitative Criteria	Number of Respondents	Percentage
Confirmed experience of the team members with a similar project	20	74.1 %
Composition of the contractor's team	16	59.3 %
Length of practice of the team members	7	25.9 %
Technical level of the contractor	9	33.3 %
Identified risks related to the project	2	7.4 %
Interview with the contractor's key personnel	3	11.1 %

Shortening of delivery time	2	7.4 %
Proposal for warranty period	4	14.8 %
Assessment of submitted documents (e.g., construction plan)	3	11.1 %
No qualitative criteria	4	14.8 %

The Table 3 of weight allocation for qualitative criteria in tender evaluation shows the range of weightage for qualitative criteria preferred by the respondents in the survey. The majority of respondents (44.4 %) chose a weightage range of 21 % to 30 %, followed by 14.8 % who preferred weightage ranges of either 11 % to 20 % or more than 50 %. Only a small number of respondents preferred weightage ranges below 10 % or between 41 % to 50 %. These findings suggest that there is no clear consensus among respondents on the ideal weightage range for qualitative criteria in public procurement decision-making.

Table 3. Weight allocation for qualitative criteria in tender evaluation

Answer	Respondents	Percentage
0 % to 10 %	1	3.7 %
11 % to 20 %	4	14.8 %
21 % to 30 %	12	44.4 %
31 % to 40 %	5	18.5 %
41 % to 50 %	1	3.7 %
More than 50 %	4	14.8 %

As far as responses (Table 4) regarding the experience with the Best Value Approach (BVA) method for qualitative evaluation of public procurement contracts, the table shows the responses regarding the experience with the Best Value Approach (BVA) method for qualitative evaluation of public procurement contracts. Among the respondents, 29.6 % have got experience with the BVA method. On the other hand, the majority of respondents (70.4 %) answered "No" indicating that they do not have experience with the BVA method. These findings suggest that a relatively small proportion of the respondents have familiarity with the Best Value Approach in public procurement evaluations.

Table 4. Responses regarding the experience with the Best Value Approach (BVA) method for qualitative evaluation of public procurement contracts

Answer	Respondents	Percentage
Experienced	8	29.6 %
No experience	19	70.4 %

With regard to responses concerning the extent of utilization of the Best Value Approach (BVA) for qualitative evaluation of public procurement contracts, the findings indicate that the utilization of the Best Value Approach (BVA) for qualitative evaluation of public procurement contracts varies among the respondents. None of the respondents reported using the BVA method regularly for selected contracts or employing it in more than 10 contracts, irrespective of the type (construction, services, or supplies). Similarly, no respondents reported using the BVA method regularly for selected contracts but applying it in 5 to 10 contracts. However, a significant proportion of respondents (50 %) reported having



utilized the BVA method for one contract, without any distinction based on the type of work. Additionally, 25 % of respondents reported implementing the BVA method in up to 5 contracts, while another 25 % provided alternative responses.

Respectfully to the extent of utilization of the Best Value Approach (BVA) for qualitative evaluation of public procurement contracts, the Table 5 shows that the majority of respondents have limited experience with the BVA method, with only a few reporting its regular use or application in multiple contracts. The findings suggest that there may be potential for increased utilization of the BVA method in public procurement evaluations.

Table 5. Responses regarding the extent of utilization of the Best Value Approach (BVA) for qualitative evaluation of public procurement contracts

Answer	Respondents	Percentage
Regularly for selected contracts. We have applied the BVA method in more than 10 contracts (regardless of type).	0	0.0 %
Regularly for selected contracts. We have applied the BVA method in 5 to 10 contracts (regardless of type).	0	0.0 %
We have implemented the BVA method in up to 5 contracts (regardless of type).	2	25.0 %
We have implemented the BVA method in one contract so far (regardless of type).	4	50.0 %
Other response.	2	25.0 %

Findings on the number of excluded or withdrawn participants in the use of the BVA method for construction works showed that of the 6 respondents who answered this question, five (83.3 %) indicated that the number of excluded or withdrawn participants was higher or much higher than in the case of traditional procurement methods. One respondent indicated that the number of excluded or withdrawn participants was the same as in the case of traditional procurement methods. No respondents indicated that the number of excluded or withdrawn participants was lower or much lower than in the case of traditional procurement methods. The survey findings suggest that the use of the BVA method for construction works may lead to an increase in the number of excluded or withdrawn participants. This is likely due to the fact that BVA considers a wider range of factors than price alone, which may make it more difficult for some contractors to compete.

The survey results presented in Table 6 regarding the criteria used in the application of the BVA qualitative assessment method in the procurement of construction works showed that the most common criteria vary depending on the specific project and the priorities of the procuring organization. However, some general trends can be observed. Professional expertise is consistently ranked as one of the most important criteria, with respondents assigning it a weight of 40 % or more. This reflects the importance of selecting a contractor with the necessary skills and experience to successfully complete the construction project. Interviews with key personnel are also seen as valuable, with respondents assigning them a weight of 40 % or more. This allows procuring organizations to gain a better understanding of

the contractor's capabilities and experience. Price is an important factor, but it is not the only one. Respondents assigned it a weight of 25 % or more. This reflects the belief that price should not be the sole determinant of the best value contractor.

Table 6. Responses regarding the criteria used in the application of qualitative criteria

Criterion	Frequency	Percentage
Professional expertise	3	42.9 %
Risks	1	14.3 %
Added value	1	14.3 %
Interviews with key personnel	3	42.9 %
Price	2	28.6 %
Other	4	57.1 %

The survey also found (Table 7) that the most common reasons for having a neutral or somewhat negative perception of BVA were time-consuming and complex to implement BVA because it can be a complex and time-consuming process to implement, particularly in organizations with limited resources, and also difficulty to quantify qualitative criteria, such as innovation and risk management, in a way that is fair and consistent. These findings suggest that there are some challenges associated with implementing BVA, but that the benefits of BVA can outweigh the challenges for organizations that are willing to invest the time and effort.

Table 7. Perception on BVA

Response	Frequency	Percentage
Positive	3	42.9 %
Somewhat positive	2	28.6 %
Neutral	1	14.3 %
Somewhat negative	1	14.3 %
Negative	0	0.0 %

To assess the intention to continue using the Best Value Approach (BVA) in public procurement, the survey results in Table 8 showed that most respondents (71.4 %) were likely to continue using BVA, while 14.3 % were unsure and 14.3 % were unlikely to continue using BVA. The survey also found that the most common reasons for intending to continue using BVA. First of all, improved selection of bidders because BVA helps organizations identify the bidder that offers the best overall value, including technical expertise, risk management capabilities, and innovative solutions. Then reduced risk of contract failure as BVA helps organizations minimize the likelihood of project delays, cost overruns, and other contractual disruptions. Also enhanced quality of project outcomes because BVA encourages bidders to go beyond the minimum specifications and propose innovative solutions that can improve the overall quality and efficiency of the project. The survey findings suggest that BVA is a valuable tool for public procurement organizations, particularly in construction projects where quality, innovation, and risk mitigation are paramount. BVA allows them to consider a wider range of factors than price alone when selecting a contractor. The weight assigned to each criterion should be determined on a case-by-case basis, considering the specific project and the priorities of the procuring organization. The survey results also suggest that some respondents are concerned about the potential complexity and time-consuming nature of implementing BVA. However, the benefits of BVA can outweigh the challenges for organizations that are willing to invest the time and effort.

Table 8. The intention to continue using the Best Value Approach

Response	Frequency	Percentage
Definitely continue	5	71.4 %
Probably continue	1	14.3 %
Probably not continue	0	0.0 %
Definitely not continue	0	0.0 %
Unsure	1	14.3 %

#### 4. DISCUSSION

This questionnaire survey, conducted in May 2023, has provided valuable insights into the state of public procurement for construction works in the Czech Republic. The key findings can be summarized as follows:

Contracting authorities are predominantly public institutions that execute construction work contracts as part of their core activities [34]. This outcome aligns with expectations since public contracts for construction works often pertain to public infrastructure projects such as roads, bridges, schools, and hospitals [35]. Contracting authorities had better carefully consider whether a public or private sector model is suitable for a specific contract. In cases where a private sector model is deemed appropriate, authorities may contemplate concession or PPP projects.

Construction work contracts are most frequently awarded through open procedures, followed by competitive procedures with a prior notice and negotiated procedures with publication. This result is also consistent with expectations, as open procedures are considered the most transparent and non-discriminatory method for contract procurement. Contracting authorities must thoroughly evaluate the choice of procurement method depending on the nature and complexity of the contract. If a contract is complex or has specific requirements, an alternative procurement method, such as a negotiated procedure with publication, may be more suitable.

The state serves as the primary source of financing for construction work contracts. This result is attributed to the fact that public administration in the Czech Republic is the principal investor in infrastructure. Contracting authorities should meticulously plan the financing of public contracts. When public financing is necessary for a contract, it is imperative to ensure adequate funds in the budget.

Contracting authorities handle the administration of procurement procedures either using their in-house resources or with the assistance of external support. This finding arises from the fact that public procurement is a relatively costly process that requires knowledge and experience. Contracting authorities must assess whether they possess sufficient capacities for administering procurement procedures. In cases where the authority lacks adequate capacities, considering external support is an option.

The average costs of procurement preparation for a typical construction work contract range in the tens of thousands of Czech crowns. These costs are contingent on the complexity and value of the contract. Contracting authorities should factor in the costs associated with procurement preparation. These costs encompass expenses for drafting tender documentation, administrative costs, and fees for legal and technical advisory services.

The average preparation time for procurement procedures for a typical construction work contract is 30 days, with the duration depending on the complexity and value of the specific contract. Contracting authorities ought to establish a realistic time allocation for procurement procedure preparation. This time

allocation should allow sufficient time for drafting tender documentation, ensuring bidder participation, and evaluating bids.

The number of bidders participating in procurement procedures for a typical construction work contract ranges from 4 to 6, with this variability depending on the complexity and value of the contract. Contracting authorities should consider strategies to increase the number of bidders participating in procurement procedures. This can be achieved through adjustments in tender documentation, lowering qualification thresholds, or offering financial incentives for participation in the procurement process.

From the provided data, the following correlations can also be identified: The number of bidders participating in public tenders is negatively correlated with the average duration of these tenders. This implies that the more bidders participate in public tenders, the shorter the average duration of these tenders. This relationship can be explained by the fact that a higher number of bidders puts pressure on the contracting authorities to conclude public tenders as quickly as possible.

The average value of additional works is positively correlated with the average extension time for the fulfilment period due to these additional works. This means that the higher the average value of additional works, the longer the average extension time for the fulfilment period due to these additional works. This correlation is consistent with the idea that as the value of additional works increases, more time is required for their execution.

The primary motivations for adopting BVA were to eliminate the prospect of low-quality bidders. BVA aims to identify and eliminate potential bidders with insufficient qualifications or experience, ensuring that only capable and reliable contractors participate in the bidding process. BVA also encourages a proactive approach to risk management, enabling organizations to identify, assess, and mitigate potential project risks before they escalate into costly issues. To acquire innovative solutions, BVA fosters a culture of innovation, encouraging bidders to propose creative and efficient solutions that go beyond the basic requirements outlined in the tender documents. What is more, BVA involves bidders in the evaluation process, giving them a platform to present their proposals, expertise, and risk mitigation strategies, fostering a more collaborative and transparent procurement process.

The respondents generally held positive perceptions of their BVA experiences. Most respondents reported that BVA had assisted them in selecting the most suitable bidder for the project because by evaluating bidders based on a broader range of criteria beyond price alone, BVA enables organizations to identify the bidder that offers the best overall value, including technical expertise, risk management capabilities, and innovative solutions. Important is reducing the risk of contract failure as by proactively addressing potential risks upfront and selecting bidders with effective risk management strategies, BVA helps organizations minimize the likelihood of project delays, cost overruns, and other contractual disruptions. And enhancing the quality of project outcomes as well, as BVA encourages bidders to go beyond the minimum specifications and propose innovative solutions that can improve the overall quality and efficiency of the project.

However, some respondents also expressed concerns about the potential time-consuming nature and complexity of implementing BVA.

The survey also provided insights into the specific application of BVA in public procurement for construction works. These findings include the most frequently used criteria for evaluating bids in BVA for construction works: professional expertise as BVA assesses the qualifications, experience, and track record of construction companies. Then risk management because BVA evaluates bidders' risk assessment capabilities, mitigation strategies, and contingency plans to ensure project resilience. Next additional value. BVA considers the bidder's ability to propose innovative solutions, value engineering, and cost-saving measures. Also interviews with key personnel as BVA encourages interviews with key personnel from the bidding companies to gain further insights into their capabilities and expertise.

The most common weightings assigned to these criteria were professional expertise: 20-50 % - this reflects the significance of the contractor's experience and qualifications in delivering quality construction projects, risk management: 10-30 % - this underscores the importance of identifying and addressing potential risks early on to ensure project success, additional value: 10-30 % - this acknowledges the value of innovative solutions, value engineering, and cost-saving measures that can enhance project outcomes, and interviews with key personnel: 20-50 % - this emphasizes the importance of gaining first-hand insights into the bidder's capabilities and expertise.

The survey findings suggest that BVA holds promise as a valuable tool for public procurement organizations, particularly in construction projects where quality, innovation, and risk mitigation are paramount. However, further research is needed to optimize the implementation of BVA in the Czech procurement landscape, addressing potential challenges such as time constraints and complexity.

## 5. CONCLUSION

This article encapsulates the findings of a research study on public works procurement in the Czech Republic within the over-limit regime. A comprehensive survey conducted in May 2023 has provided valuable insights into the current landscape of public works procurement. The study aimed to gather pertinent information concerning the present state of public works procurement, identify key trends, relationships, and dependencies among procurers of public works contracts in the construction sector, and pinpoint problematic aspects of setting evaluation criteria in public contracts for construction works in the Czech Republic.

The research findings have led to the formulation of practical recommendations for public purchasers. These recommendations, based on the use of qualitative criteria in public procurement, are expected to enhance the quality of project outcomes and improve the efficiency and transparency of the procurement process. The research has also contributed to the academic community by providing new insights and perspectives in the field of public works contracts in the construction sector.

The Best Value Approach (BVA), a recent development in public procurement policy, has emerged as a valuable tool for public procurement organizations. BVA, with its emphasis on qualitative criteria, signals a shift towards considering the overall value of a bid rather than just the cost. This could lead to a re-evaluation of procurement policies to incorporate more qualitative aspects.

The use of BVA allows for a more comprehensive evaluation of suppliers, considering factors such as expertise, risk, and added value. This could result in the selection of suppliers who are better suited to deliver the required services or goods, thereby improving the effectiveness of public procurement. However, the implementation of BVA would require careful consideration and potential adjustments to existing procurement policies and practices.

Despite concerns among some respondents regarding the potential complexity and time-consuming nature of BVA implementation, the benefits it affords can outweigh these challenges for organizations committed to investing the requisite time and effort. The survey results highlight a need for additional research on BVA implementation in public procurement. Potential areas of focus for such research include the development of best practices for BVA implementation, evaluation of the effectiveness of BVA in achieving its objectives, and comparison of BVA with alternative approaches to public procurement. These findings and recommendations are expected to serve as a valuable resource for policymakers, practitioners, and researchers in the field of public procurement.

As mentioned earlier, the findings of this survey can be utilized to enhance the public procurement process, increase transparency, and improve overall efficiency in procurement practices. The following considerations and potential recommendations for the future regarding public procurement practices can be summarized as follows:

- **Environmental Impact:** Contracting authorities have to seriously consider the environmental impact of public procurement and prioritize procurement methods that promote sustainable development and environmental protection.
- **Impact on Regional Development:** Contracting authorities should assess how public procurement affects regional development and favour procurement procedures that contribute to the development of the local market and communities [36].
- **Impact on Competitiveness:** Procuring entities would consider how public procurement affects competitiveness and favour procurement practices that support economic growth and innovation [37].
- **Efficient Use of Public Funds:** Contracting authorities ought to systematically consider the possibility of achieving comparable results at lower costs or in a shorter timeframe for public contracts.
- **Quality of Performance:** Contracting authorities must emphasize requirements for the quality of contract performance and ensure that contracts are executed in accordance with technical standards and safety requirements [38].
- **Satisfaction with Performance:** Contracting authorities ought to regularly assess satisfaction with contract performance and consider opportunities for improving collaboration with bidders and suppliers.

In conclusion, this survey offers valuable insights into the state of public procurement for construction works in the Czech Republic, with implications for future practices and policies. Contracting authorities must continually monitor the evolving landscape of public procurement, drawing on the latest knowledge and experiences to enhance efficiency and transparency in their processes, ultimately achieving better outcomes for the public sector [39]. The findings emphasize the importance of selecting appropriate procurement methods, evaluating administrative capabilities, managing costs, ensuring transparency, and fostering competition in the construction procurement sector. Additionally, recognizing and addressing the environmental and regional impact of procurement decisions can contribute to sustainable development and local economic growth [40]. Lastly, the quality of performance and stakeholder satisfaction should remain central considerations for contracting authorities as they continue to refine their procurement practices.

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