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Public procurement of engineering consulting services

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Subject review

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The process of public procurement of services and goods and the assignment of construction and/or execution of works in the Republic of Croatia is permanently accompanied by complaints from both public contracting authorities and economic operators. Contracting authorities understand the result of the public procurement process by coercion, and bidders too often challenge the result of public procurement by appeals through which they seek the protection of their rights, which, according to them, are violated in the public procurement process. Occasionally, voices from both positions can be heard saying that the application of the Public Procurement Act produces results that generate further misunderstandings about the assessment of the quality of the existing Act. Particularly drastic indicators are expressed by the processes of public procurement of engineering consulting services, where the application of the principle of the most economically advantageous tender is distorted to the point of absurdity, which, as a result, directly or indirectly, causes societal damage. This paper explores and analyses current legislation, confronts the provisions of individual laws that create the space for performing engineering consulting services, and analyses the practice of public procurement on illustrative examples. Proposals for possible improvement of both the legislation and the behaviour of public procurement participants in everyday practice are also presented.

Key words:
public procurement, engineering consulting services, construction project, success criteria, references

Pregledni rad

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Javna nabava inženjerskih konzultantskih usluga

Proces javne nabave usluga i roba te ustupanja građenja i/ili izvođenja radova u Republici Hrvatskoj trajno prate žalopojke i javnih naručitelja i gospodarskih subjekata. Javni naručitelji razumiju rezultat procesa javne nabave prinudom, a ponuditelji rezultat javne nabave prečesto osporavaju žalbama kroz koje traže zaštitu svojih prava, koja su, po njima, narušena u procesu javne nabave. Povremeno se čuje glas s obje pozicije da se primjenom Zakona o javnoj nabavi dobivaju rezultati koji generiraju daljnje nesporazume oko ocjene kvalitete postojećeg Zakona. Posebno drastične pokazatelje iskazuju procesi javne nabave inženjerskih konzultantskih usluga, gdje je primjena principa ekonomski najpovoljnije ponude iskrivljena do apsurda, koji kao posljedicu, izravno ili neizravno, uzrokuje društvenu štetu. U radu je istražena i analizirana aktualna legislativa, sučeljene su odredbe pojedinih zakona koji kreiraju prostor obavljanja inženjerskih konzultantskih usluga te je na ilustrativnim primjerima analizirana praksa javne nabave. Izneseni su i prijedlozi mogućeg poboljšanja, kako legislative tako i ponašanja sudionika javne nabave u svakodnevnoj praksi.

Ključne riječi:
javna nabava, inženjerske konzalting usluge, graditeljski projekt, kriteriji uspješnosti, reference

1. Introduction

The process of implementation of public procurement of services and goods and the assignment of construction and/or execution of works in the Republic of Croatia, in accordance with the Public Procurement Act and the requirements of public contracting authorities, is permanently accompanied by complaints from both parties involved in the process, and public contracting authorities and economic operators who are permanent or occasional heads of project activities in the development of construction projects. Too often, both complain about the complexity and conditionality of the public procurement process set by law and the final result of the implementation of the process.

Contracting authorities see the result of the public procurement process as coercion, and economic operators too often challenge the result by appeals through which they seek the protection of their rights, which, according to them, are violated in the public procurement process.

Particularly drastic indicators are expressed by the procedures of public procurement of engineering consulting services, where the application of the principle of the most economically advantageous bid is driven to the point of absurdity. The results of the public procurement of engineering consulting services too often directly or indirectly, as a result, generate social damage. This is a widely known, reluctantly acknowledged, most often ignored fact. Bad practice has gone on for too long, and while there are strong reasons for change, there is no political readiness.

Among other things, the reason for the change lies in the provision of the Act which states that the weighted price ratio or cost and weighted quality may be in favour of the cost up to a maximum of ninety percent [11]. The application of this provision in regular practice means nothing more than actual and factual competition exclusively by price. And this is a devastating practice for the company, for the clients and especially for the construction consulting profession, which generates societal damage and degrades and destroys the engineering profession.

The result of the public procurement process directly and relentlessly affects the development of the next phases of the implementation of the construction project and ultimately the final result of the construction project, which is too often far from the planned main design goals: quality, deadline, and cost. This is a distinct fact proven many times over, both in practice and in literature. This fact is followed by proposals and requests for changes, more in terms of the application of the Public Procurement Act, and less in terms of ambiguity or clumsiness of the Act.

The paper explores and analyses current legislation and the interference of the action of the provisions of individual laws in creating the space for performing engineering consulting services, and analyses the practice of public procurement on specific examples, without specifying the name of the project and the address of the contracting authority. The data on the analysed projects can be found in the archives of the paper's authors. In the presented examples, certain provisions from the tender documentation are quoted, in particular from the contract for the provision of services, which provisions are not subject to negotiations, but are imposed on economic operators. Based on the analysis of such practice, comments and suggestions for changing the current way of acting and behaviour were given.

The Conclusion summarized the conducted research procedure and submitted to the public for assessment the proposals for changing the existing practice of public procurement of engineering consulting services, all with the aim of creating, as far as possible in the existing social relations, a stimulating and positive atmosphere for generating changes.

The theory and practice of design and implementation of construction projects clearly differentiates project change and project disruption. In the existing implementation of public procurement of engineering consulting services, on which this paper focuses, it is easy to recognize when the threat of change appears, when the threat of disruption is present, or when change and/or disruption are present.

2. Legislative framework for the assignment and performance of engineering consulting services

The conditions for the implementation of the public procurement process are determined and limited by the Public Procurement Act, while other laws on the public procurement process act through the attribution of the requirements of competitiveness, expertise, and competence of economic operators and their employees, which are required in the public procurement process in accordance with the interest of the subject of public procurement.

The contracting authorities more than often do not accept the requirements and restrictions of other legislation that affects the scope and quality of measures that ensure undisturbed and legal conditions for the implementation of the contract in accordance with the result of the public procurement process, so unnecessary project changes occur in the implementation of the contract, and often project disruptions as well.

Particular procurement documentation must, in addition to accepting the requirements and restrictions given in the Public Procurement Act, apply the requirements and restrictions given in other laws and legal regulations determining the realization of the subject of procurement, all in the interest of a stable development of the public procurement process.

Engineering consulting activity is regulated by the Construction Act (OG 153/13, 20/17, 39/19, 125/19), the Act on Physical Planning and Construction (OG 78/15, 118/18 and 110/19), the Act on the Chamber of Architects and Chambers of Engineers in Construction and Physical Planning (OG 78/15, 114/18 and 110/19), the regulations of architectural and engineering chambers and the Ordinance on the manner of conducting professional supervision of construction, the form, conditions and manner of keeping a construction log and on the content of the final report of the supervising engineer (OG 111/14, 107/15, 20/17 and 98/19).

The paper is targeted at the Public Procurement Act, its advantages, peculiarities, but also vagueness, the sometimes-not-best provisions, without proposing specific changes or amendments, and other laws are considered as secondary, but distinct factors of the process of public procurement of engineering consulting services.

Proposals for amendments to the Public Procurement Act, the Construction Act and the Act on Activities in Physical Planning and Construction can be found in the Consulted and Used Sources.

2.1. Public Procurement Act

The Public Procurement Act (OG 120/16, 114/22), which is of special interest to this *paper, passed last changes in October 2022, when the Act on Amendments to the Public Procurement Act was published in the Official Gazette.* The changes in question were mainly related to changes in appeal procedures and to the permitted percentage of increase in the price of contracts in certain cases (Article 317 of the PPA.)

The authors are convinced that in understanding the application of the Act, it is necessary to consider the result of the conducted public consultation, which preceded the publication of the aforementioned amendments to the Act.

During consultation, a noticeable number of comments and proposals were received, both from contracting authorities and economic operators, who continuously or occasionally participate in public procurement procedures.

Most of the comments did not refer to the proposed or envisaged and limited space for changes, but economic operators pointed out the shortcomings of the applicable Act, which are an obstacle to achieving optimal results of the public procurement process. Both contracting authorities and economic operators indicate the necessity of amendments to the Act, but the process of amendments has not been initiated.

Several proposals point out the necessity of changing Article 289 – Extremely low bid price. The rejection or acceptance of the bid with an extremely low price is exclusively reduced to the assessment of the Contracting Authority whether the Bidder's submitted explanations of the extremely low price are acceptable.

In the case of works, individual cost items, if they are extremely low, are difficult to defend in any other way than by elaborating calculations and submitting valid bids for products and materials covered by these items. Therefore, if an extremely low price is offered for the works, this can only be defended with precise mathematics that is based on evidence and is really easy to check.

With engineering consulting services, things are different, and we easily enter the emotional sphere of relationships and interpretations of the offered extremely low price, where common sense flies out the window. Justifications for the offered extremely low price lists feelings, aspirations and desires such as "attachment to work", "emotional connection to the project", "desire to participate in the project, even if for free", etc.. The explanation of the offered extremely low price is not based on verifiable data and calculations, but on emotions, inspirations, and aspirations.

In accordance with the provision of the applicable *Public Procurement Act, the Contracting Authority may reject the bid only if the explanation or the submitted evidence does not satisfactorily explain the low proposed price level,* [11] i.e., the contracting authorities, even if they are world-class psychologists and connoisseurs of mental chakras, cannot reject such explanations as irrelevant and must accept the offer of engineering services with a price below any reasonable threshold, if the bidder gives and defends it, because this is their deepest urge. And the contracting authority is not to toy with the mental state of the bidder!

Is this unsustainable practice in the legally regulated market of engineering consulting services? It is, but the Act stays the same, because during public consultation, "extremely low bid", i.e. Article 289 *was not the subject of the Draft Proposal of the Act on Amendments to the Public Procurement Act, and* such comments were *noted.* [19].

Will the institution of the extremely low bid ever become the subject of discussion in existing social and market relations that brutally underestimate the social value of engineering consulting services? The answer to this question requires an in-depth analysis that must include societal, economic, social, vocational and professional aspects of the forces of action in the Croatian open market of engineering consulting services.

For now, we can only state that there no small responsibility for the current state of the engineering consulting services market lies at the feet of individual economic operators, with a few exceptions, which abuse the opportunity that the Act provides, but also the engineering profession and its organizational forms.

Several comments in the public consultation process referred to the practice, promoted by the Act, of relying on other economic operators to demonstrate competence. Economic operators in the public procurement process use the references of other economic operators in order to meet the criteria for participation in public tendering. In doing so, economic operators, which have provided important references, are entitled to a minimum of one – three percent of the price in the performance of the concluded public procurement contract.

Although item 2 of Article 390 of the PPA unequivocally stipulates that *an economic operator may rely on the competence of other entities in the public procurement procedure to prove that they meet the criteria related to educational and professional qualifications or with relevant professional experience only if these entities will perform the works or provide the services for which that competence is required* [11], in practice this is often reduced to assigning these entities the role of "advisor" on the project, for a small financial compensation, i.e., the services can essentially be performed by any economic operator who does not have the required competencies if they find a partner who will provide them with a reference.

The inadequacy of legal solutions on the one hand and the lack of application of a verification mechanism and determining whether the economic operator on which the bidder relied in the public procurement process is actually involved in the performance of the contract on the other hand directly create preconditions for the occurrence of social damage, i.e. guarantee a drastic deviation from the design objectives of the construction project.

The Provider of engineering consulting services with an evidently inappropriate level of knowledge and experience is in a position to harm, without serious consequences to themselves, primarily the construction project, consequently the contracting authority and future users of the results of the construction project. The presented problem of the application of *the Act has been acknowledged* by the authorities, but so far nothing has been done.

The contracting authorities more than often do not apply measures that ensure the implementation of the contract in accordance with the result of the public procurement process, but suffer inappropriate, poor quality of service under the platitude that the application of appropriate measures would mean the termination of the contract, which means reopening the painful public procurement process with a likely similar outcome as the result of the public tender that led to the current state of implementation of the contract.

These examples are presented as an illustration of the unacceptable situation in the practice of applying the Act, with its ambiguous provisions and their application, as a situation that results in social damage, while rarely achieving a real benefit. The current situation requires amendments to the Act and this must happen as soon as possible. The waiting time for change is creating further social damage.

2.2. The impact of other laws on the process of assignment and performance of engineering services

In accordance with the public procurement practice, the provisions contained in the procurement documentation are of the utmost importance for the resulting public procurement contract, i.e., for its implementation credibility, applicability and incentive, in the absence or at least the limited presence of contractual provisions that are the basis for initiating disputes.

In doing so, the procurement documentation must, in addition to respecting the requirements and restrictions of the Public Procurement Act, take into account the requirements and restrictions contained in other laws and legal regulations relevant to the subject of procurement.

Engineering consulting activity is regulated by the Construction Act (OG 153/13, 20/17, 39/19, 125/19), the Act on Physical Planning and Construction (OG 78/15, 118/18 and 110/19), the Act on the Chamber of Architects and Chambers of Engineers in Construction and Physical Planning (OG 78/15, 114/18 and 110/19), the regulations of such chambers and the Ordinance on the manner of conducting professional supervision of construction, the form, conditions and manner of keeping a construction log and on the content of the final report of the supervising engineer (OG 111/14, 107/15, 20/17 and 98/19).

In the recent period, in relation to the number of active construction projects, the Act on the Renovation of Earthquake-Damaged Buildings in the City of Zagreb, Krapina-Zagorje County, Zagreb County, Sisak-Moslavina County and Karlovac County (OG 21/23) is of great importance.

In conditions where the contracting authorities, under the pressure of the expected or present action of the control bodies, consistently and restrictively apply the provisions of the Procurement documentation and the PPA, while neglecting the requirements and restrictions of the relevant laws and regulations for the engineering consulting profession, there is regular disagreement between the contracting authority and the service provider in the interpretation of the understanding and thus the interpretation of the requirements and restrictions of the relevant laws and regulations.

Public procurement procedures and the administration of public procurement contracts are carried out by contracting authorities by hiring certified employees or specialized external consultants, who too often do not have relevant experience, i.e. appropriate prior information on the requirements and restrictions of the subject matter of procurement and are not sufficiently familiar with the specific requirements and restrictions of special regulations defining the conditions for the provision of services, delivery of goods or execution of works. This is almost regularly followed by the forced application of certain legal provisions, the impact of which is not timely considered, which directly leads to the negotiation process, often even to the opening of the dispute process. A current example is the Reconstruction Act. During public consultation, it the text underwent individual changes and some provisions became clumsy and in conflict with other applicable legislation. As illustration, we cite Article 30, item 3:

(3) **The professional construction supervision referred to in paragraph 1 of this Article in the form of a chief supervising engineer may be performed by an authorized civil engineer with at least five years of work experience in the design of buildings and an authorized architect with at least five years of work experience in the design, professional supervision or execution of works** [15].

Without discussing the justification of the requirements and restrictions related to the function of the main supervising engineer, we point out the notorious fact (Construction Act) that the task of the main supervising engineer is to coordinate the activities of authorized, independent supervising engineers of different professions in space and time and that they are not authorized to give orders to supervising engineers for professional conduct. In doing so, they are also authorized to create conditions for the smooth and efficient work of supervising engineers, taking into account design and legal limitations and requirements.

The illogical nature of the provision of the Reconstruction Act was also recognized by the Chamber of Certified Civil Engineers, which requested that the Ministry of Physical Planning, Construction and State Assets clarify or interpret the said provision. The Ministry confirmed that in the context of the Act in question, the tasks of a chief supervising engineer can be performed by an authorized civil engineer or an authorized architect with a total of at least five years of work experience in the field of design, professional supervision, or execution of works. In this way, it regulated which authorized engineers and with what time-defined experience can perform the tasks of the main supervising engineer, but without the condition of specific experience!?

The job of the main supervising engineer is mostly related to the construction site, so construction experience (supervising engineer) should be one of the exclusive requirements. Given the nature of the tasks and duties of the main supervising engineer, there is no justification for establishing a restriction that the tasks of the main supervising engineer can only be performed by a person with experience in performing these tasks. Such a restriction would directly lead to the blocking of certain competencies, which is simply in essence and practically not acceptable.

The Reconstruction Act was not amended and the disputed provision remained unchanged. In the procedures for the

procurement of professional supervision services for building renovation projects after the earthquake, the contracting authorities copy the unchanged provision into their procurement documentation and during implementation there was a misunderstanding about the nomination to the position of chief supervising engineer of an authorized engineer with no experience in design, and with enviable experience in supervision (and as chief supervising engineer).

This is the practice of unnecessarily spending time and energy of the contracting authority and economic operators on discussions on the application of the awkwardly worded provision of the Reconstruction Act, with the Ministry's poorly available statement on the provision in question in the public space.

The example is somewhat absurd, but, unfortunately, it illustrates the practice of public procurement that requires changes in both the Act and the behaviour of contracting authorities and economic operators. Changing the law is much easier and simpler, but the behaviour of the contracting authority and economic operators through coercion and restrictions leads to the "law changing the practice", instead of having it in reverse, with "practice changing the law".

The multitude of investigated conducted processes of public procurement of engineering consulting services indicates a very common practice of requiring supervising engineers and the main supervising engineer to perform tasks that are not their legal obligation. With reasonable business reasoning, the service provider accepts such obligations, and their performance usually comes at the expense of high-quality performance of legal obligations. In addition, the practice presents scenarios in which key persons are required to perform the tasks of the main supervising engineer, engineer (FIDIC contracts) and the construction project manager (at the construction stage) at the same time. The request for the fate of the construction project was not very welcome.

The main supervising engineer has the task of coordinating the work of supervising engineers in time and space.

The engineer has the task of administering contracts for the construction or execution of works.

The construction project manager has the task of managing the development of the construction project through permanent control of the state of project activities and with the necessary project initiative and anticipation of possible or threatening project changes or, even more demanding, project disruptions.

Is it right to burden a person with the mentioned obligations? A binding answer to this question requires serious, purposeful due diligence, so we will avoid it here.

These scenarios give many reasons to consider engineering consulting services a "necessary evil" imposed by legislation. This and such assessment ignores the fact of the exceptional social importance of engineering consulting services and neglects their non-minor and essential role in the implementation of construction projects.

The practice of public procurement of engineering consulting services must be based on the presumption of the exceptional importance of the capacity and competitiveness of the service provider who will direct the development of the construction project towards the success of the project.

The required and expected quality of engineering consulting services must be the basis for the opening of the public procurement process! The pursuit of this goal must be a social obligation of both the legislator and the contracting authorities and economic operators.

3. Social value of engineering consulting services

A long time ago, one of my fellow engineers said, and many have said it again, that engineering achievements are out of the public's mind. We would like to add that in no case can the public's interest in the results of engineering activities match the public's interest in the prices of *vegetables* at the city's main market. Simply and directly speaking, the social valorisation of the results of the engineering consulting service performed is dramatically below its real social value and impact on overall social development.

Is there any connection between the objective/subjective experience of the success of engineering consulting services provided and the social, not to mention the public experience of the success of the construction project, and the assessment of the real value of the very complex and professionally demanding engineering consulting services provided? The result of the engineering consulting services provided has a direct impact on the economic effects of the economy, on the comfort of residents, on social and personal communication, on safety in movement, on fire safety, on the speed of overcoming distances, and more.

In the book *Philosophy of Success of a Construction Project, the* author explores the functional success of a construction project, its relationship with the general and/or personal impression of success. Objective indicators of the success of the construction project are based on the established relationship between the planned, often expected, main and side goals of the construction project and the achieved goals of the project implementation, i.e. the results of the project. However, each of us subjects objective facts or indicators based on facts to our own impression. And they have an immediate, legitimate, inalienable and undeniable right to do so. Where is this leading us? Into a narrow, one-way street, in which only the rules set and applied by the individual person with their requirements, limitations, advantages and weaknesses apply. Where is the exit? In comparison. In the possibility that a person has the opportunity, which is very often extremely unacceptably limited, to hear, read, understand, understand, accept, or reject the impression of another person, or a third person, or fifth. Through such a process, we might come to the generally acceptable impression, not imposed upon by any one person or social authority.

If that is an option, what is the reality? Is this just a theoretical proposal for the basis for play? It probably is, but attempts at play are always or should be based on the expected joy of meeting others. Others who are similar to us, but at the same time so different. However, the title of the chapter says, "*Social value of engineering consulting services*". It might be better if it said, "*The social value of the results of the engineering consulting services* performed." In this way, we would be closer to the story of value valorisation.

First of all, engineering consulting services, their performance and result are based on knowledge, experience and professional and social responsibility, sometimes on the curiosity and imagination of engineers in the first steps of the development of the construction project. Secondly, the result of engineering consulting services is a product that, as the final product, has become the use value of all random and intentional, targeted users. Thirdly, the application of the results of engineering consulting services with the moment of commencement of use becomes a daily habit of the user. The habit arises from the moment of the first application of the results of the engineering consulting service performed. Fourth, the present and welcome habit in the rattle of history tidies up the basis and origin of the habit itself.

We cross bridges every day without even noticing them. We only notice them sometimes when walking along the riverbank, and this is much less often than crossing a bridge while walking or driving.

Without thinking that this is the result of the ability and selfless work of engineers, we apply the results of the engineering consulting services provided: we ride and walk through the streets, roads, bridges, viaducts; we fly in planes, use runways, enter and exit airport buildings; we drink tap water, bathe and swim in pools; we climb cable cars to the tops of hills, ski on well-maintained ski trails; we produce and discard waste and much more. It makes no sense to further state that the results of the performed engineering consulting services are our everyday life. Without the glamour, shouting or thrilling with the message, we are just pointing out that the results of the engineering consulting services are part of our everyday life. That's the catch!

The social value of the results of the engineering service performed will never be in the public focus. This happens and will continue to happen only when the result is not good or, worse, is dangerous to use or utterly unusable. In engineering disasters!

This results in the valorisation of the current social value of the results of the performed engineering services, and it is below any realistic acceptable minimum.

How to deal with the catch? Do not be at peace with the existing situation. Escape anonymity, escape professional and vocational confinement and anonymity.

How to achieve this? Decent, thoughtful and controlled, daily aggressive information about the efforts and achievements of the engineering profession, achievements that will be used by others, which will also be part of other people's lives.

What will be the result of these and such activities? Creating a public space in which the social value of the results of the engineering consulting services performed and the impact of the engineering profession are valued.

This will also result in a change in the impression of the value of engineering consulting services. We shouldn't hope that the public's interest in the results of engineering consulting services performed will ever exceed the interest in the prices of vegetables on the market, but small advances are also important.

Who is responsible for achieving the goal? Engineering associations, but above all, every engineer personally. This must be understood by every member of the engineering profession.

No, it's not just a recommendation to break through and get engineers out of social anonymity. It is a request to reconsider one's own social role, social responsibility in a society that formally does not recognize class divisions, but accepts as irrevocable the fact of the existence of a focused, graduated social interest on the basis of which an impression is obtained and disclosed of the value of the social contribution of the results of the actions of individual social groups, including engineers as well as teachers or train drivers.

4. Current public procurement practice

The current practice of public procurement of engineering consulting services in the Republic of Croatia is characterized by the application of the provisions of the Public Procurement Act in a way that does not rely on a possible different interpretation and purposeful application of legal provisions, even within the limits provided by the Act.

The criteria for assessing the eligibility of bids and the criteria for awarding the contract shall be established on the basis of the minimum requirements of the subject matter of procurement, without applying the criteria relevant to the construction project in question.

Almost regularly in the tender documentation, especially in the text of the contract, which cannot be influenced by the bidders, the deadline risk for the provision of the client's service is transferred to the service provider, without any possibility of influence on their part. Croatian courts also consider acceptable a provision which often in the same sentence, in the same article and in the same paragraph sets a deadline for the performance of the service, to following that with making the deadline optional or having the deadline be determined descriptively in another case, and as such ignores the calendar completion of the contract, i.e. considers it irrelevant.

This is evident in contracts for the provision of engineering consulting services related to contracts for the execution of works. In these contracts, which are not influenced by economic operators, the risk of meeting the deadline for the execution of works is transferred to the service provider.

This section will structurally consider the elements of the current public procurement practice: contract performance deadlines, public procurement value assessment, bid eligibility conditions, contract award criteria, implementation of appeal procedures and possible directions of change.

4.1. Current trends

The current practice of public procurement of engineering consulting services is characterized by the risk-averse application of the provisions of the Public Procurement Act in a way that leaves no room for any interpretation of the requirements of legal provisions even within the limits determined by the Act, all while working on the principle of "don't rock the boat".

The criteria for assessing the eligibility of bids and the criteria for awarding the contract shall be established on the basis of the minimum requirements of the subject matter of procurement (as required by the Act), while knowingly avoiding the application of the criteria actually and essentially relevant to the individual

construction project, due to peace in the home and avoidance of unpleasant questions and challenges during the development of public procurement. In addition - almost a regular occurrence in the tender documentation - especially in the text of the contract, which cannot be influenced by the bidders, the risk of the deadline for the provision of the client's service is directly transferred to the service provider.

The Croatian courts also find acceptable the contractual provision that, often in the same sentence, determines the deadline for the performance of the service, and later in the sentence, the deadline is invalidated by the provision that the deadline is only indicative, or in the second case the deadline is determined descriptively, so that the deadline is related to the completion of the contracted services, regardless of whether the service provider's actions could have influenced the achievement of the deadline. This is especially evident in contracts for the provision of engineering consulting services related to contracts for the construction or execution of works. In these contracts, which could not be influenced by economic operators, the risk of meeting the deadline is transferred to the service provider. This ignores the fact that the service provider is obliged to perform all contracted services within the calendar deadline, by the force of logic and technology of service provision, and that in the event that the deadline for the provision of services is extended without their responsibility, they have an essential, legitimate right to conclude an addendum to the contract that changes the deadline, but also determines an additional financial fee for the provision of services after the calendar contracted deadline for the provision of engineering consulting services.

The contractual provision on the payment of the performed engineering consulting services, the dynamics of which are related to the performance of a third party, is particularly fundamentally unjustified, and eschews the logic of avoiding conflicts of interest.

By their very nature, the service provider is in a position to have a drastically present, dominant and inevitable cost of time consumption in the costs of performing the service. The success of a third party most often, i.e. regularly, is not a category that can be seriously affected by the provider of engineering consulting services, and bears the consequences of the third party's failure. This is especially evident in the provision of supervision and management of construction projects. The contracting authorities regularly ignore this fact and link the payment of the services provided directly to the progress of the contractor in the execution of works. With a few honourable exceptions!

The rationale of the contracting authority is clear: the failure of the contractor is the failure of the service provider. This correlation is very rarely present in the implementation of construction projects and as such must not be a generally accepted model for paying the financial value of the service provided. This model establishes an illegitimate and unfair relationship between the contracting authority and the service provider in which the contracting authority grossly and unjustifiably transfers its risk of the project deadline to the service provider. It also opens up space for possible manipulations, which is socially unacceptable and punishable.

The practice of the system of insurance of performance guarantees, i.e. performance bonds, is particularly unjustified. The amount of the performance guarantee is based on the client's expectation that the provider of engineering consulting services will, contrary to the provisions of the contract, not perform some of the contracted services. Therefore, it is about covering the project risk.

The Contracting Authority shall be entitled to charge from the performance guarantee the difference between the cost that they will bear by hiring a third party to perform a service that was not performed by the contracted provider and the cost that, in accordance with the contract, they would have paid to the contracted provider if they had performed their contractual obligation. Sometimes this also applies to the performance of the contracted service within the agreed deadline.

This risk of the contracting authority decreases with the progress of the provision of the contracted service and as such completely disappears at the time when the service is performed.

This means that the probability of the occurrence of risks tends towards zero, and that the guarantee for the remediation of the consequences of the occurrence of risks, as an absurd result of the present approach, is valid in the full amount until the conclusion of the contract.

It is reasonable to expect that, in order to reduce the total costs of the construction project, the contracting authorities, through the progress of the project, reduce the requirement for the amount of the performance guarantee of the participants in the development of the construction project. Many, including the authors of this paper, have written about this.

The existing drastic indicators of negative trends that should be influenced in the future through requirements and restrictions, primarily legislation, are only indicated and recorded here.

4.2. Tender documentation

The content of the messages sent by the contracting authority to economic operators through the tender documentation and its appendices is crucial both for the result of the public tender and for the successful implementation of the contract concluded on the basis of the results of the conducted public tender.

The quality of tender documentation articulating the requirements and restrictions of the subject matter of procurement requires timely, sensitive, targeted activity of persons and groups in charge of preparing the tender documentation. Time and especially money must not be spared on the preparation of the documentation, because the money saved on the preparation of the tender documentation will entail additional costs, both in the implementation of the public tender process and in the implementation of the contract based on the results of the public procurement process.

This paper will focus on the content messages of the tender documentation that directly and inevitably condition the overall success of the public procurement process. All in accordance with the basic interest of the work, which is the procurement of engineering consulting services, with the fact that the said procurement of services is simply transferred to the procurement of goods and the assignment of works. These include:

- deadlines for the provision of services

- estimating the value of the service
- bid eligibility criteria
- contract award criteria
- appeal procedures
- possible directions of change

Each of the listed messages contained in the tender documentation deserves an in-depth and comprehensive analysis of the procedures in the implementation of public tenders, but due to the limited scope of work, we will rely on significant phenomena according to their frequency in public procurement processes and their impact on the quality of the results of the public procurement process.

In the possible directions of change, we will show the view of the necessary and easily implemented amendments to the Public Procurement Act, in particular the provisions on the unacceptably low price, the bid selection criteria, then the pacification of the area of offering engineering consulting services, the improvement of professional responsibility and the development of professional and material competencies of economic operators, all in order to improve the content and competencies of the messages that must be contained in the tender documentation.

4.2.1.Deadlines for the provision of services

Among the present significant trends in the public procurement process is the practice of public contracting authorities, when preparing the procurement documentation (hereinafter: PD) of engineering consulting services to binding ones, without any possible influence from economic operators, neither through the procedure of prior consultation nor through the process of preparation of bids, i.e., inquiries of economic operators to the public contracting authority, put provisions in the service contracts linking the deadlines for the performance of the service and the dynamics of payment of the performed engineering consulting services to the financial implementation of the contractor contracts that are the subject matter of the service.

The risk of the public contracting authority, related to the plan discipline of the contractor, is transferred directly and roughly, without substantial justification, to the provider of the engineering consulting service. In doing so, they ignore the evident fact that the time engagement of experts in the project team of the provider of engineering consulting services is the basis of the value of the service performed, and thus the basis for the dynamics of payment for the engineering consulting service performed.

Through the Terms of Reference, which is an integral part of the PD and the service contract, the Contracting Authorities define in great detail the tasks of the service provider for the various phases of the project (preparatory phase, phase during construction, phase after completion of construction), while ignoring the fact that the intensity of service provision is related to the inexorable passage of time, and any failure of the contractor in the execution of works requires unforeseen additional engagement of the engineering consulting service provider. On the one hand, the client's requirements are related to the time stages of project development, and on the other hand, this fact is ignored in the contractually defined payment schedule for the service provided.

The practice of public procurement of engineering consulting services also includes certain requirements of the public contracting authorities that economic operators assume the risk of the public contracting authority in response to possible, uncertain project disruptions, especially in the field of time realization of the construction project. There is no justification for such a practice and it can only be understood as an argument of force.

The example that we will show below, which illustrates all the drastic attempts of public contracting authorities to transfer their risks to an unsuitable recipient, is concrete and was in some way the motive for the preparation of this paper.

The Contracting Authority attaches the calculation and payment of the engineering consulting service directly to the financial implementation of the contractor contracts and requires that the time extension of the service provision up to 15% after the agreed time be considered the exclusive risk of the service provider, with the obligation of the service provider to perform an indefinite possible extension of the contracted scope of the service after the fifteen percent extension for a fixed fee in the amount of twenty percent of the contracted value of the service.

The contracting authority requires the service provider to perform the service with the assumption of the financial burden of risk, which is in the domain of the contracting authority, in such a way that they are obliged to assume the defined risk (15% of the contracted time) and the uncertain risk of performing the service for an unknown duration for the known amount!? It is a contract where neither the value of the service nor the deadline for the provision of the service are known, two essential determinants of any contract!?

In the public procurement procedure for engineering consulting services, the economic operator referred to the contracting authority the question of the existence of such a request: "In the published Procurement Documentation, in item 59 the Contracting Authority states: In the event that there is an extension of the duration of individual contracts concluded with the contractor, when this extension exceeds the deadline for the execution of the service in connection with the items of the Bill of Quantities on the service of supervision, up to and including 15% of the duration specified in this procurement documentation, and that this extension of the works contract is not caused by the action of the Provider of the construction supervision services, the service provider shall be obliged to adapt to this situation and shall have no right to additional claims due to such an extended deadline. In the event that there is an extension of the duration of individual contracts concluded with the contractor, when this extension exceeds the deadline for the execution of the service in connection with the items of the Bill of Quantities on the service of supervision, over 15% of the duration specified in this procurement documentation, and that this extension of the works contract is not caused by the action of the Provider of the construction supervision services, the service provider shall be obliged to adapt to this situation and shall have the right to additional claims due to such an extended deadline. The additionally claimed amount in this case is 20% of the value calculated by dividing the contracted value of the supervision on individual contracts concluded with the contractor (items of the Bill of Quantities on the supervision service) by the initial duration of the supervision on that individual contract for the execution of works in months. The payment of this amount shall be applied on a monthly basis after the extension of the duration of individual contracts concluded with the contractor, in connection with the items of the Bill of Quantities on the service of supervision, exceeds 15% of the duration specified in this procurement documentation. (Quote of the contracting authority's request!) [7]

It follows from the provisions of the procurement documentation prescribed in this way that, regardless of the fact that the service provider is not responsible for extending the deadline, their contract will be extended, without the possibility of increasing the price of the supervision service, which is directly dependent on the time engagement of individual experts.

Such a provision transfers the obligation to anticipate and quantify the risk of extending individual contracts for the execution of works to the Provider, which cannot be determined at the time of making the bid and which places the Provider in an unfavourable and restrictive position. Furthermore, the provision in the procurement documentation by which the Provider of the supervision service, in the event of an extension of the agreed deadline up to and including 15% of the duration, does not have the right to claim, is not in accordance with the legal provisions and the Contracting Authority is requested to amend the said provisions.

Furthermore, in the event of an extension of the duration of individual contracts concluded with the contracting authority over 15% of the duration, the contracting authority shall provide the Provider with an additional claim, but only in the amount of up to 20% of the value of the service of supervision on individual contracts on the execution which the service of supervision covers. The supervision service provider is required to perform the service in a high-quality manner and without delays, by meeting the minimum engagement of experts prescribed in Book 3, all for a maximum of 20% of the value of supervision under a particular contract. With this provision, the Contracting Authority also places the supervision service provider in a unfavourable position, and limits the right of claim of the Provider, which is not in accordance with the provisions of Articles 316 and 317 of the PPA 2016, since they provide for the right to increase the price up to 50% of the total value of the original contract for supervision services. There is also no legal basis for distinguishing claims for additional supervision services up to 15% and over 15% of the duration of individual construction contracts.

Taking into account the above, the conditions set out in this manner are not in accordance with the provisions of the PPA 2016, and especially bearing in mind that the Contracting Authority has determined in the procurement documentation the application of the provisions of the PPA 2016 related to changes to the contract. Given that the Contracting Authority has stipulated in the procurement documentation that the relevant Articles of the PPA 2016 apply, i.e., Articles 314 to 321 regarding amendments to the contract, it is proposed to the Contracting Authority to clearly and precisely determine the possible amendments to the contract during its duration, i.e., in accordance with the relevant Articles of the PPA 2016, to amend the statement of the Procurement Documentation in the part of payment for supervision services in the event of an extension of the duration of works in such a way as to determine:

- In the event that there is an extension of the duration of individual contracts concluded with the Provider according to the duration specified in the procurement documentation, and that this extension of the works contract is not caused by the action of the Provider of the construction supervision services, the service provider shall be obliged to adapt to this situation and shall have the right to additional claims due to such an extended deadline by applying the provisions of Articles 314 to 320 of the PPA 2016 related to the limitation of the increase in price [7]."

The response of the contracting authority was as follows: The *economic operator issues a bid for the service of supervision of works of a certain scope - a set (1 km of pipeline, 1 Wastewater Treatment Plant... etc.), and given the dynamics of works dictated to a certain extent by the Contractor (with regard to the contractual conditions/deadlines Contractor – contracting authority), the engagement of individual experts can be concentrated in a shorter or longer period of time.*

The Procurement documentation, item 19 - The deadline for the commencement and completion of the contract - specifies in detail which circumstances are possible and that the contracting authority cannot accurately estimate the duration of the contract at this time.

For example, it is stated that "The amount of activities of the Provider will vary during the duration of the contract and this should be taken into account when preparing the bid, proposing and recruiting professional staff of the Provider" and that "the Provider must plan the allocation of supervision activities to their staff in a flexible manner in order to ensure the goals of the project. The deadline for completion is indicative and depends on the contractors, and the Service Provider is expected to perform the tasks in this task in full, regardless of the indicative date of completion of the services stated above "

The economic operator submits a bid per piece of service, and not per time unit of the duration of the contract, and the contracting authority considers that such a proposal of documentation is not "contrary to legal provisions".

The economic operator offers the service for the execution of the complete service, regardless of the deadline for the execution of works, and in the event that it is nevertheless increased for a longer period, then the Contracting Authority provides for the method of charging for this extension in the amount it considers adequate (although it is not a legal obligation).

The interpretation of the provisions of the PPA 2016 is wrong: Article 316 provides for changes to the contract in the event that a service was not included in the procurement (it does not refer to the extension of the deadline, but additional services), and Article 317 includes changes due to circumstances that the careful contracting authority could not foresee – with an increase in the price of up to 50% of the original contract, and since the contracting authority envisaged changes to the contract in relation to the extension of the deadline in the Procurement Documentation, it also determined the appropriate method of calculation in the name of extending the duration of the service (although it is not a legal obligation).

The Contracting Authority considers that the prescribed applicability of the provisions of Articles 314-320 of the PPA 2016 in the Procurement Documentation will enable the execution of the contract and, in unforeseen circumstances, the extension of deadlines... (and as further prescribed in item 59 of the Procurement Documents), and the same prescribed conditions apply to all potential bidders [7].

The provision of engineering consulting services cannot be reduced to the delivery of goods, and the contracting authority in its response does just that. The provision of engineering consulting service cannot be offered per piece because it is factually

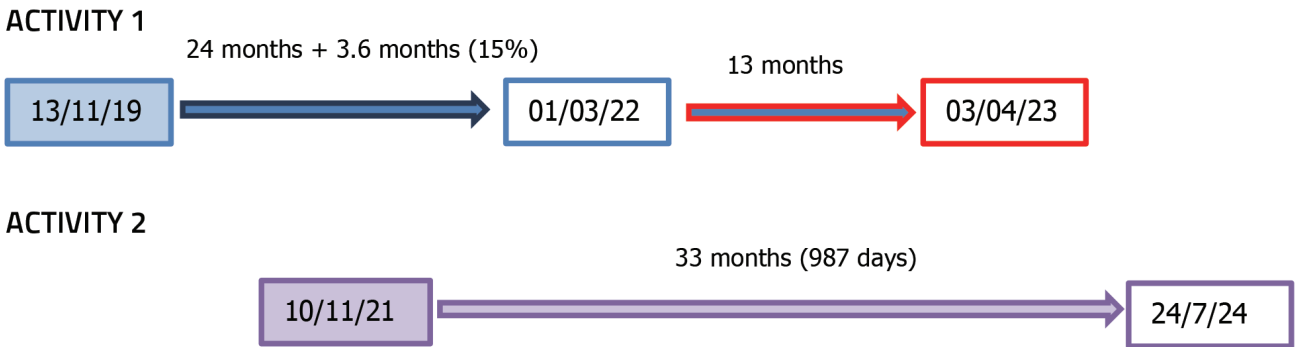

Figure 1. Planned and realized deadlines for the execution of works for which the engineering consulting service was performed

and evidently related to the time unit of service performance at the agreed time.

The contracting authority starts from the position that neither the deadline nor the value are important for the contract, but solely and exclusively the obligation of the service provider to perform the service in an unlimited period of time, with a limited possibility of charging the actual value of the service performed in time.

For the core of the opinion of the contracting authority, it is irrelevant whether the request and the justification of the request of the contracting authority are the product of the employees of the contracting authority or the product of the consultants who provide the service of creating the Procurement documentations.

The Contracting Authority states in the cited answer: The *Procurement documentation, item 19, The deadline for the commencement and completion of the contract - specifies in detail which circumstances are possible and that the contracting authority cannot accurately estimate the duration of the contract at this time... The deadline for completion is indicative and depends on the contractors, and the Service Provider is expected to perform the tasks in this task in full, regardless of the indicative date of completion of the services stated above* [7].

From the quoted text, a simple conclusion is drawn that the contracting authority is not able to consider the deadline for the performance of engineering consulting services. The contracting authority explicitly transfers the risk of an undefined deadline to the service provider, regardless of whether or not the service provider's (in)action will influence the change of the deadline. The risk related to the duration of the provision of the service is unjustifiably transferred by the contracting authority to the service provider who is not in a position to anticipate, quantify, and enter the value in the contracted amount of the service.

Such an attitude of the contracting authority implies the possibility that the service provider, based on the time uncertainty of the duration of the service and the fifteen-percent risk, will offer the value of the service at a level that will not be based on realistic, true, and verifiable facts, but on speculations, and speculation may also result in costs borne by the contracting authority that it would not have in a responsible relationship to their own obligations and the obligations of the service provider.

By its request and explanation, the Contracting Authority denies the principle of the Public Procurement Act of 2016, in particular Art. 200, paragraph 1.: *The procurement documentation must be clear, precise, understandable and unambiguous and made in such a way as to enable the submission of comparable bids,* and para. 2.: *The procurement documentation must enable the calculation of prices without assuming unusual risks and undertaking extensive preliminary works of the bidder* [11].

The above example of the implementation of the contract explicitly confirms all the implementation unsustainability of such requests, which directly leads to the process of opening a dispute on the reasonable limit of liability of the service provider for the deadlines for the performance of the contracted service. It is an well-known fact that without a fixed deadline and value of the service, no contract is valid.

The following graphic presentation shows the planned and realized deadlines for the execution of works on which the engineering consulting service was performed. The Service Provider had the task of performing a service on the construction project, which was planned and implemented through two base activities within a single deadline for completion.

Figure 1 shows that the 2nd construction activity and the contracted engineering consulting service were activated two years (24 months) after the start of activity 1.

The project disruption is reflected in the fact that the Service Provider's experts for a period of 24 months (from 13 November 2019 to 10 November 2021) consumed the contracted (expected) engagement time in full on activity 1, and they should have been engaged in parallel on both activities.

The duration of Activity 1 was extended by 17 months (contracted duration of 24 months), and in that period, the service provider was obliged to perform the services without additional compensation for 3.6 months (15% of the extension of the contracted duration of the service).

For activity 1, the agreed deadline for the completion of works expired on 3 April 2023, and in accordance with the provisions of the contract on the execution of works, the Client charged the Contractor with the maximum amount for delay and informed the Contractor that they terminated the contract with the Contractor on 1 March 2024. Taking into account the fact that the contract with the contractor is a standardized type of FIDIC contract, regardless of its termination with the contractor, the contract for the provision of supervision services is active, i.e., the service provider is obliged to provide the contracted service for activity 1, all in accordance with the service contract.

In their letter, the Client informed the Contractor that the agreed deadline for completion for activity 1 has expired and that the Contractor is in an inadmissible delay, i.e., that the Client has not extended the duration of the subject contract because there was no contractual basis for it.

For the extension of the duration, i.e. the extension of the deadline for the completion of construction contracts, the contractual procedure implementing the provisions of the FIDIC Red and Yellow Books is very clearly defined. Article 1.1.3.3 of the general contract terms defines as follows: "*Completion Deadline" means the time required to complete the Works or Part of the Works (as the case may be) referred to in Article 8.2. [Completion deadline], as stated in the Appendix to the Bid (with any extension referred to in Article 8.4. [Extension of Time for Completion), counting from the Commencement Date* [21, 22].

Article 8.2. of the general *contract terms defines as follows: The Contractor shall complete all the Works and each Part of the Works (if any) within the Time for Completion of the Works or Part of the Works (as the case may be), including:*

a) successful passing of the Tests upon completion and

b) the completion of all works specified in the Contract as necessary for the Works or Part of the Works to be considered completed for the purpose of taking over under Article 10.1.

Article 8.4. of the general contract terms defines: *Pursuant to Article 20.1 [Contractor's Claims], the Contractor shall be entitled to an extension of the Completion Deadline if the completion for the purposes of Article 10.1 [Takeover of Works and Parts of Works] shall be delayed due to any of the following reasons:*

- amendments (unless a change to the Time for Completion has been agreed under Article 13.3. [Amendment procedure]
- cause of delay giving right to 'extension of time under any article of these Contract Terms
- extremely unfavourable climatic conditions
- unforeseen shortage of personnel or funds that may be caused by an epidemic or government actions or
- any delay, impediment or cause for which the Client, the Client's Personnel or other contractors of the Client at the Site are responsible.

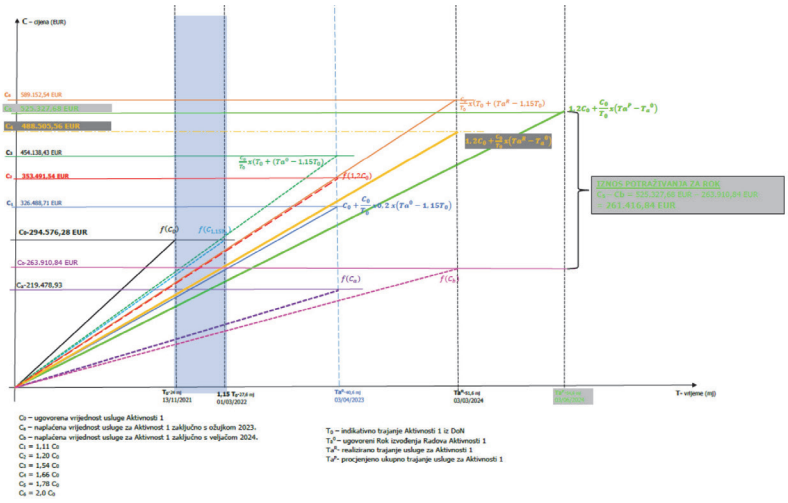

Figure 2. The ratio of time, cost and income in the performance of the service

If the Contractor considers that they are entitled to an extension of the Completion Deadline, they shall notify the Engineer in accordance with Article 20.1. [Contractor's Claims]. When an extension of time is determined under Article 20.1, the Engineer shall review previous decisions and may extend, but not reduce, the overall extension period.

Unfortunately, the stated period of service provision after the expiration of the deadline for the completion of construction contracts, which are the subject of the service, is not covered by the service contract. The fact is that the contracting authority recognizes a direct correlation between the provision of engineering services and the time engagement of experts who make up the professional team that performs the contracted service, but in the contract for the provision of services defines the calculation and payment of the performed service in a diametrically opposite manner. Simply, the request of the contracting authority for the manner and quality of performing the contracted service does not correlate with the conditions for calculating the value of the service provided.

As an integral part of the Procurement documentation and the contract on the provision of engineering services for the contracting authority, the project terms of reference require:

Professional staff

It is required that the Provider's professional staff be familiar with all relevant laws and regulations of the Republic of Croatia and the EU which may in any way affect the realization of works and construction related to the realization of this contract, as well as the FIDIC contractual conditions relevant for the performance of this Contract.

During the construction phase, the Provider must be constantly present at the project site with a sufficient number of staff members at all times, to ensure that the projects are effectively implemented and supervised.

The Provider must adjust their working hours to the working hours of the Contractor and shall not be entitled to compensation on that basis.

The required time of attendance at the construction site - % of the total duration of the Project is specified below for each expert. The Provider must keep records of the presence of experts on construction sites, which are certified by the Contracting Authority's Authorized Person, and the Provider must enclose them with the situations they issue to the Contracting Authority. The same records must unequivocally prove the presence of experts in accordance with the requirements of this Project Terms of Reference... [7]

The partially quoted text of the Project Terms of Reference clearly shows that the contracting authority requires from the professional staff, which consists of a team of experts, presence at the project location and very clearly specifies it for each individual expert position. It is not of little importance that the contracting authority is bound to the contracted time of performance of the

Table 1. Contracting construction works and related consulting services

Estimated and contracted values of construction works and consulting services / Groups of construction projects	CONSTRUCTION WORKS			PROFESSIONAL CONSTRUCTION PROJECT SUPERVISION/MANAGEMENT		
	Estimated value (PV)	Contracted value	Percentage of PV	Estimated value (PV)	Contracted value	Percentage of assessed value
Road construction	300.604.307,93	287.298.194,80	96 %	9.794.854,89	4.285.878,91	44 %
Water supply and drainage	87.602.617,69	108.425.686,22	124 %	5.395.342,41	3.005.794,40	56 %
Other infrastructure projects	184.623.487,00	238.684.912,00	129 %	4.001.436,25	2.293.501,00	57 %
Earthquake damage renewal projects	104.927.361,86	154.927.361,86	147 %	2.393.457,27	596.096,00	25 %
AVERAGE CONTRACTED IN RELATION TO % OF ESTIMATE			124 %			45 %

service, without that time being actually and factually determined by the contract. Although the provision regarding the presence of experts at the site is questionable, we shall not deal with it here.

Based on the required time engagement of individual experts, economic operators calculate the costs of performing the service and determine the values of the engineering consulting service they expect to perform.

The calculated direct cost of the engineering service is based on the expected time of engagement of individual experts of the members of the project team of the service provider. By adding indirect and fixed costs such as warranty costs, the economic operator determines the total financial value of the engineering consulting service, which is distributed according to the appropriate key by the activities of the subject matter of the contract, which the contracting authority regularly requires through the Procurement Documentation.

Through such a stipulated method of contracting a deadline without a deadline for the provision of the service, the economic operator is in the position of an entity that must take on the consequences of the occurrence of risks in the area of responsibility of the contracting authority and, in calculating the value of the service, having to start from assumptions that can be both varied, and exclusively at their own business responsibility.

Figure 2 illustrates the objective unsustainability of such a practice, the end result of which is slow, and disputes always lead to societal damage, regardless of whom the damage is "pinned" on.

The practice, which also contains an example shown here, points to the unsustainability of public procurement procedures whose business responsibility for the term of the contract of third parties is transferred from the sole holder of responsibility (with all the elements of protection and such positions of the contracting authority), which is the contracting authority, to the service provider in cases of extension of the service and when the service provider had no influence on the extension of the deadline that occurred due to the responsibility of third parties to the construction project.

4.2.2. Estimated value of the subject matter of procurement

At many professional meetings, constant attention is paid to the fact that in the market of engineering consulting services, primarily the service of professional supervision of construction, there is a deviation between the estimated value of procurement and the wide range of the offered prices, from those close to the estimate to those dramatically lower than the estimate.

This paper does not consider cases when contracting authorities conduct public procurement for complex engineering services that require significant engagement both in time and in the number of experts, and with a significantly underestimated estimated value of the subject of public procurement. In such cases, economic operators, i.e. potential bidders, regularly have no opportunity to influence the published estimated value of the procurement because it is the result of the contracting authority's preparation of the project. Even in the case of such public procurement procedures, the contracting authority receives bids that are economically and business unjustified below the estimated value.

The fact that economic operators on the market of engineering consulting services offer services far below the level of the estimated value of the service and that on the basis of such bids, contracting authorities conclude contracts, indicates that the acceptability of such a bid is not assessed in the process of public procurement, but in the process of evaluating bids, bids playing the emotional card or bids without a solid business foundations are accepted almost regularly.

Clarifications are based on the presumption that the economic operator will perform the required service with the expected business loss, which, in accordance with their decision, will be compensated from other sources. The clarification ignores the fact that, during performance of the contracted service, the economic operator will be primarily motivated to reduce the costs of performing the service. This also means suboptimal performance of the contracted service.

Contracting authorities accept such scenarios as a given that they cannot avoid, and this entails serious doubt about the results of the implementation of the contract thus concluded. The inevitable consequence is the questionability of the relationship of the economic operator, the delivery of the contract according to the assumed contractual obligations, which ultimately results in project disruptions.

Saving in the wrong place, which is what this case is about, does not save budget funds, but devalues them. It must never be forgotten

that real and responsible quality is never and cannot be the subject of price competition, especially not with an extremely low financial bid.

As other authors have repeatedly pointed out in their research, in the *case of engineering services, the lowest price is not in the interest of the contracting authority, since the level of this service ensures the level of quality and defines the price of the entire investment.* However, most often the public tender criteria are defined in such a way that, regardless of the score of the technical value of the bid, the evaluation of acceptable bids is reduced to the acceptance of the bid with the lowest bid price as the most favourable bid in the public tender in question. By systematically accepting the lowest bid price as relevant or winning, the contracting authorities also accept the fact that they will not receive a quality response from such a bidder to the requirements and restrictions of the subject matter of the procurement.

With such a practice, the contracting authorities inadvertently, but effectively accept the level of quality of the engineering consulting service which is below at least optimal and often below the minimum quality required by the subject matter of the tender. This, without neglecting the responsibility of economic operators involved in such activities, creates the conditions for a systematic decline in the decisive competitiveness and ability of economic operators, that is, supports processes in which the social interest of creating new values is directly endangered with optimal investments in construction projects. This practice does not encourage investments in improving the knowledge and skills of economic operators leading to competition in quality, but accepts the current approach to the preparation of bids, which is based on the imperative of the economic operator to obtain an order or contract, solely on the basis of the competitiveness of the offered price.

The basis of this practice are the provisions in Article 289 of Section D Extremely low prices, Chapter 5 Estimated value of the procurement of the Public Procurement Act. The existing practice explicitly requires urgent change not only of Article 289 of the PPA.

The assignment of construction and/or performance of works through public procurement processes offers a different picture of the results of the process. Why is that so? For a few simple reasons. The process of privatization of large construction systems that operated in the Republic of Croatia after the independence of the state led to the collapse or complete deterioration of the existing construction capacities. Foreign bidders have appeared on the Croatian construction market. Market demands were not accompanied by adequate capacity or quality responses from economic operators. New capacities appeared on the market, but the ratio of demand and supply was still in favour of higher demand.

It is not possible to argue for emotional interest as the reason for extremely low bids, as the prices of works, materials and equipment are easily verifiable and provable, and the works are contracted at the level of the estimated value of the procurement, and in some cases at significantly higher prices.

Table 1 provides indicators that vividly confirm the previous statements about separate public procurement procedures by groups of construction projects carried out during 2023.

Table 1 clearly shows that the works are contracted at prices significantly higher than the estimated procurement values, while engineering consulting services are not worth half of the estimate. The ratio of the value of works and services is based on the ratio of millions and thousands of euros, so a 24 percent increase of the estimated value of the assignment of works amounts to several tens of millions of euros. For supervision or project management services, the amount is several thousand euros.

By contracting services on the basis of extremely low financial bids, contracting authorities can initially save about two percent of the total investment on the project, and because of a poorly performed service, they most often encounter costs that could and should have been avoided, which range up to 25% of the financial value of the project.

Socially unacceptable risk is the basis for the amendment of the Public Procurement Act, which must strengthen the practice of evaluating acceptable bids on the basis of the most economically advantageous bid and legitimize the system of prior elimination of an extremely low bid. Without such amendments, the quality of engineering consulting services on construction projects remains endangered and with questionable results.

The estimated value of the subject matter of public procurement is regularly at the level of the real value of engineering consulting services and consequently the results of the performed services, which is confirmed by research. The market response of individual economic operators participating in the public tender for the procurement of engineering consulting services opens the space for disinformation and devaluation of this notorious fact, which results in direct and indirect social damage.

4.2.3. Bid eligibility criteria

The Public Procurement Act starts from the position that for the culture and prosperity of public procurement in stipulating the bid eligibility criteria, it is necessary to immediately start from the minimum criteria for the competence of the bidder, which is a condition for quality performance of the (contractual) obligation required by the scope and quality of the subject matter of procurement.

In principle, this requirement is justified and there is no reason not to start from the above criteria in the design of the public procurement process, but practice shows that such criteria are transferred to minimum requirements that do not reflect the actual needs of the subject matter of procurement.

There is no objection to the provisions of Article 256 of the Public Procurement Act, which reads as follows: *(3) When determining the selection criteria referred to in paragraph 1 of this Article, the contracting authority may only require minimum levels of competence that ensure that the economic operator will be able to perform the public procurement contract.* [11].

Apart from the fact that this provision is not exactly in line with the character of the Act, which should require and prohibit, and not allow ("the contracting authority may"), "competence" according to the Act means:

1. competence to perform professional activity
2. economic and financial competence
3. technical and professional competence.

Sposobnost za obavljanje profesionalne djelatnosti izvan je inCompetence to perform professional activity is beyond the interest of this paper because the criterion essentially comes down to the bidder's possession of authorization to provide services that are the subject matter of public procurement. It is quite logical and inevitable that a service, and in the context of the said article, an engineering consulting service in construction, can only be provided by a company registered for such activity and employing certified engineers of different professions. Although according to the Act, even for this criterion, there is an acceptable practice of using the competences of third parties, the intention of the legislator to leave room for manipulation when fulfilling the set criteria is not clear.

The criteria of economic and financial competence and the criteria of technical and professional competence of economic operators require special attention. The objective of the paper is not to consider what and how should or must be specifically changed in the Act regarding the evidence, and in practice, but to draw attention to the social need to valorise the existing legal solutions and the practice appropriate to the Act. It is an existing practice of designing and establishing the requirements of a minimum level of competence of an economic operator.

Evidence of the economic operator's economic and financial competence in practice comes down to the fact that the economic operator must clearly prove that, in the last three relevant financial years, it has had a total turnover at least equal to the estimated value of the procurement.

It is immediately clear that this criterion is in no way related to the financial and economic requirements of the subject matter of procurement. It is easy to conclude that such a criterion expects an economic operator to prove that its financial and economic capacity is at the level of the requirements of the subject matter of the procurement. Therefore, the inevitable question is how will an economic operator that is actually at the level of minimum competence fulfil a contractual obligation that requires the use of all available capacities and how will they reconcile this criterion with the requirements of obligations to third parties?!

A much more reasonable and useful criterion would be the one related to the economic and financial competence of the economic operator in the delivery of construction consulting services on construction projects of the scope and quality that is equivalent or similar to the subject matter of procurement. This would give an insight into the real potential of the economic operator to successfully respond to the requirements of the subject matter of the procurement.

In practice, the consistent average requirement, in accordance with the provisions of the Public Procurement Act, does not take into account either the duration of the relevant public procurement contract or the financial obligations of the service provider during the term of such contract, nor does it refer to the past, existing and possibly future financial potential or capacity of the economic operator. Simply, the fulfilment of the requirements does not provide information on the financial and economic potential of the economic operator, but provides historical data that does not actually and factually point to a conclusion on the current competitiveness of the economic operator!?

The Act allows economic operators to use the benefits and advantages of another economic operator in the process of public procurement, in the creation of bids in accordance with the requirements of the subject matter of procurement, i.e. in accordance with the provisions of the tender documentation. In practice, this model, which is in its essence positive and acceptable in principle and which requires either the application of the principle of solidarity, in the case of a consortium of bidders, or a designated subcontractor, when the responsibility lies with the economic operator which is the bidder and/or is awarded a contract, too often results in actual deception of the contracting authority, which cannot be proven because formally everything is in order, in accordance with the requirements and restrictions contained in the tender documentation. Formally, the bid includes an economic operator with the required potential, which will play a banal, negligible role in the implementation of a possible contract.

The bidder which will, on the basis of a legally implemented public procurement process, sign the contract as a service provider, does not have the required financial capacity and formally compensates it with the capacity of a third party, which will as a rule not be used in any way. They were and remain only a legal, but not a useful basis for fulfilling the requirements from the tender documentation.

Contracting authorities in the public procurement process must recognize such "borrowing" as appropriate (because in accordance with Article 276 of the PPA, the contracting authority "can" (but is not required to) demand joint and several liability in the event of reliance on economic and financial competence). Of course, this does not apply to a consortium of bidders where there is a distribution of contractual obligations, but also the institute of joint and several liability, which is an integral part of the service contract.

It is a notorious fact that a bidder in the first phase of the public tender and then as a contractor in the implementation phase of the public tender results is expected to temporarily finance the costs of fulfilling the contractual obligation until the first payments, which as a rule do not cover the initial costs of fulfilling the contractual obligation. How the contractor manages to do this remains unknown, and is not the subject of interest of this paper.

It is an indisputable and legitimate requirement of the Act that public procurement must not be directed in any way towards certain economic operators, i.e. that it must not be selective, but it directly ignores the requirements and restrictions of the subject matter of public procurement, i.e. allows for the possibility for economic operators who do not have actual and effective capacities to independently respond to the requirements and restrictions of the subject matter of public procurement to participate in the particular public procurement process. Explicitly stated, the Act preferentially protects the interests of economic operators at the expense of the interests of the public contracting authority, or even more specifically at the expense of the interest of the (construction) project in accordance with which the public procurement process is initiated.

It is undisputed that public procurement must be open to all potentially capable economic operators, but this openness must be

limited on the one hand by the scope and quality of the requirements of the subject matter of procurement, and on the other hand by the actual capacities of economic operators participating in the public procurement process. In the spirit of equality and equal opportunities, it is necessary to enable both younger and smaller and weaker companies to participate in public procurement procedures, but not at the price of quality and assurance of performance of obligations. The Act, however, allows this, without defining actual tools for any verification and assurance in terms of the sustainability of the contracted services.

The context of the requirements to prove technical and professional competence of economic operators is the same, but possibly with rougher connotations. Namely, in its application, the Act enables economic operators to use the institution of possible reliance on the technical and professional competence of a third party in the public procurement process, which is not in compliance with the spirit and intention of the Act, that is, to use the competences of third parties, in the absence of evidence of their own technical and professional competence in the public procurement process, as proof that they are able and willing to use the competences of third parties when they do not possess their own.

In doing so, there is no explicit obligation of a third economic operator to actually and effectively participate in the performance of the contractual obligation. Roughly and directly speaking, the Act enables a "trade" in references, without any consequential liability of "traders" in the realization of the subject matter of procurement, i.e. in the development of the project.

In the procurement documentation, contracting authorities ultimately require that economic operators in the public procurement process show that they have an appropriate level of knowledge and experience, all in accordance with the requirements and restrictions of the subject matter of public procurement. They are looking for a specific and narrowly focused experience of the economic operator because they expect that the response will confirm that it is highly likely that the economic operator with such experience is able to perform the required contractual obligation.

In practice, contracting authorities rely on the institution of references, which are based on historical facts and not on anticipation of future competence. Competence is proven by the attached data on previous, relevant experience, on the basis of the same or similar fulfilled contractual obligations that the economic operator duly performed in the reference period.

A reference about the proper performance of a contractual obligation submitted by an economic operator shows that the contract has been properly performed, but not who actually and effectively performed the contractual obligation, the said economic operator or a third party on their behalf and for their benefit. It would be wise to evaluate competence on the basis of references for proper performance of the contract and in particular for proper performance of the obligations that are the subject matter of the contract, with an appropriately established and transparent relationship of competitive value of these two references.

Conclusions on future competence are made on the basis of past competence. Is this enough? No.

For a quality assessment of the future competence of an economic operator to meet the requirements and restrictions of the subject matter of procurement, in addition to past references, we would have to legally open the space for assessing the existing and future competence of an economic operator, without fear that this will lead us into uncertainty when assessing the relevance of indicators on the actual future potential of an economic operator. Of course, such an approach requires an additional dose of responsibility of both economic operators and contracting authorities.

In the implementation of the Act, an economic operator is given the opportunity to include a third economic operator to prove the required competence (experience and reliability) for them, which convincingly possesses the required competence, but without any effective obligations. The Act reads as follows: The *reference is valid only if such an economic operator (on which the bidder relied for the purposes of proving technical and professional competence) will perform the services for which this competence is required.* The message could also be understood that you can rely on someone's experience if they will perform this service, and you will learn and gain your experience with them. Should this be the purpose and justification for the implementation of the public procurement process? Certainly NOT! However, it is to be expected that entities whose capacity and competence can meet the requirements of the subject matter of procurement should and must participate in the public procurement process.

Of course, this expectation does not exclude the institution of a consortium of bidders, which is a guarantor through the system of joint and several liability that some of the contractual obligations will be performed by a member of the consortium with the strongest and most convincing competencies. In fact, a properly and purposefully established consortium of bidders is the basis for a fully competent response of the bidder to the requirements and restrictions of the subject matter of the procurement.

We believe without reservations that, in the creation, establishment and implementation of the public procurement process, it is necessary for the contracting authorities to abandon the legally possible solutions of substituting competence with the competence of a third economic operator for the purposes of proving competence, because such solutions are too far from the actually successful responses to the requirements and restrictions of the subject matter of the procurement. This can easily be accomplished through an adequate targeted evaluation of previously disclosed criteria of own and "borrowed" competence, all in accordance with the Act, but also with the interest of the subject matter of public procurement! Namely, these criteria are not a way of favouring an economic operator, but a legitimate protection of the interests of the subject matter of public procurement and as such no one will be able to challenge them in a public procurement procedure prepared in such a manner.

4.2.4. Contract award criteria

In accordance with the Public Procurement Act, the public contracting authority must award the contract to the economic operator whose bid, based on the evaluation of acceptable bids

of the applied model of the most economically advantageous bid, has been assessed as the most advantageous.

Through the evaluation of bids, the most favourable bid is selected, which has been established as the optimal ratio of qualitative reliability and value of the bid and the offered price for the realization of such a bid as a contractual obligation. And that's the catch. This is the basis of the actual value advantage of the bid, which is clumsily expressed in the Public Procurement Act. The Act directly and explicitly states that the price must not be the only element of the bid evaluation and that the ratio of the price weight and the quality weight must not exceed 90 percent in favour of the price. It may not be higher, but may be lower. Not "may be", but "must be"!

Too often, practice shows that this ratio is not lower because the contracting authority then does not risk disputes when choosing the lowest possible weight in favour of the price. In this case, quality requirements can easily follow the principle of balancing, i.e. quality requirements are established at an existential minimum for the subject matter of public procurement, with the belief that the subject matter of public procurement is thus sufficiently protected. The results of such public procurements show that this is not the case, especially in procurement of engineering consulting services.

The quality criterion, especially in procurement of engineering consulting services, is regularly based on the assessment of the relevant experience of experts, which must not be discriminatory and must be related to the procurement in question. A requirement justified by law.

For the sake of illustration, we state that in order to evaluate the experience of the supervising civil engineer, it is not possible to ask how many apple trees he planted, but it is possible to determine the criteria that will enable the evaluation of the undoubtedly visible experience of experts whom the economic operator claims to engage in the implementation of the offered and contractually agreed obligations. It is crucial for the overall success of the results of the conducted public procurement process that a strong and undeniable connection between the obligations from the bid and the obligations in the implementation of the contract is established in the public procurement process.

The State Commission for Supervision of Public Procurement Procedures approves of the practices used by the contracting authorities in determining the relevant criteria for the evaluation of bids, while strictly complying with the condition of connection of the criteria with the subject matter of public procurement, which is evident from the Commission's decisions on appeals against the provisions of the procurement documentation in the part of the contract award criteria.

When the subject matter of a public tender is the provision of engineering consulting services, contracting authorities should make the most of the offered legal opportunity by ensuring, to the greatest extent possible, the real quality of the staff who will provide the contracted services in accordance with the requirements and restrictions of the subject matter of procurement.

In daily practice, however, the price weight is too often at the legal maximum of 90 percent, which makes capacity, competence and reliability of experts irrelevant. As such, the impact of quality is declared irrelevant or superfluous, and price is the law, because the quality requirement only appears "as must", so it should be minimized.

An example is a hypothetical ratio of the price weight and the quality weight at the legally limited level. Bidder (1) gave the most favourable price (100 points), and its quality was rated lower than the best (30 points). Bidder (2) gave a price lower than the best (90 points) and the best quality (100 points).

$P_1 = 0{,}90 \times 100 + 0{,}10 \times 30 = 90 + 3 = 93$

$P_2 = 0{,}90 \times 90 + 0{,}10 \times 100 = 81 + 10 = 91.$

With a slightly higher price, Bidder (2) has no chance of getting the order based on the best rated quality of an acceptable bid!

The same example with slightly changed price and quality weights gives a different picture:

$P_1 = 0{,}85 \times 100 + 0{,}15 \times 30 = 85 + 4{,}5 = 89{,}5$

$P_2 = 0{,}85 \times 90 + 0{,}15 \times 100 = 76{,}5 + 15 = 91{,}5$

By slightly changing the weight, Bidder (2) receives the order because it offered the best quality.

Isti primjer uz neznatno promijenjene pondere cijene i kvalitete daje drugačiju sliku:

$P_1 = 0{,}85 \times 100 + 0{,}15 \times 30 = 85 + 4{,}5 = 89{,}5$

$P_2 = 0{,}85 \times 90 + 0{,}15 \times 100 = 76{,}5 + 15 = 91{,}5$

The presented arbitrary examples prove how important it is for the contracting authority to strive to achieve the optimal result of the conducted public procurement through the system of weighting the price-quality ratio in the process of public procurement of engineering consulting services.

Luckily and skilfully selected weights of price and quality are not and cannot be the basis for satisfaction, i.e. they do not automatically indicate a reliable expectation of the results of the implementation of the public tender. The purpose and mission of free competition is not and cannot be based only on price, but must provoke competition between the most potent capacities and the best competencies, with the Act encouraging effective competition between relevant economic operators.

The criteria for awarding the contract are of fundamental importance to the success of the public tender and must not be understood by the contracting authority as an obligation, but as a tool by which it will transparently, provenly and verifiably carry out the process of selecting the best bid.

By determining the quality weight and the price weight in accordance with the requirements and restrictions of the subject matter of public procurement, especially in the cases of procurement of engineering consulting services, with professional and careful elaboration of evaluation criteria (scoring the experience of experts), contracting authorities will receive the truly most economically advantageous bid, with the optimal ratio of quality and price, and then, within the planned financial resources, they will receive a top service.

It is the interest of each public and private contracting authority to achieve an optimal procurement result in any public procurement or procurement procedure for the needs of private construction projects, especially when it comes to engineering consulting services,

in accordance with established and transparent preferences. Contracting authorities which require engineering consulting services must be aware of the fact that their preferences will have a direct impact on the result of the conducted tender, and thus ultimately on the success of the construction project.

4.2.5. Appeal procedures

The presentation of the current state of public procurement of engineering consulting services in the light of individual uncertainties in the existing legal provisions and the application of the existing legal provisions would in no way be complete without at least a brief review of the work of the State Commission for Supervision of Public Procurement Procedures (DKOM), the state institution to which economic operators turn to in order to, in their understanding and view, protect their rights that are endangered or violated in public procurement processes.

Given that the authors of this paper are regularly, from day to day, participants in a series of public tenders, they cannot but apologize for their nevertheless subjective approach, i.e. for a somewhat reasonable bias in the selection and treatment of this topic.

Only an entity that has not had the opportunity to experience the results of DKOM's work can claim an impartial and objective, reasoned consideration of decisions made by DKOM in public procurement procedures and, based on such targeted, clearly structured consideration, make meritorious and clear conclusions.

In their professional activities, the authors of this paper repeatedly participated in the appeal procedure and, in an effort to protect the business interests of the economic operator, presented arguments to point out the omissions in public procurement procedures, the result of which was the subject of the appeal procedure. In a few cases, despite all the arguments and undeniable evidence of omissions in the public procurement process, they failed to achieve the expected solutions to the appeal procedure. Such outcomes leave deep traces, accumulate dissatisfaction and are remembered for a long time. They often lead to long, worthless discussions and subsequent analyses of DKOM's decisions, all with regard to the impact of such decisions on the success of the construction project.

Each public procurement procedure, including the procedure of public procurement of engineering consulting services, is unique and is treated as such in the event of possible complaints. There is no institution of a solution to the appeal as a precedent (except for the published DKOM's legal interpretations), and the members of the DKOM Council consider each individual appeal claim in the context of specific public procurement documentation and make decisions on the basis of legal provisions, requirements and restrictions contained in the procurement documentation and additional evidence of the parties to the appeal procedure on the formal correctness of the conducted public procurement process and its results, regularly without entering into the merits of the justifiability of the appeal procedure.

Nevertheless, economic operators, which have a legal interest in filing an appeal, draw attention to previous decisions of DKOM made in appeals on a similar or identical issue. In this way, they try to substantiate their arguments and merits of the appeal and further emphasize the justification of the claims. It is good for practice that the published opinions of the members of the DKOM Council are repeated from procedure to procedure and thus in some way become, if not precedent, at least an "unwritten rule".

The issue of the implementation of appeal procedures before DKOM is an inexhaustible source for studying, analysing and discussing the conducted appeal procedure and its results. In the context of the current interest of this paper, we will consider a recent decision of the State Commission for Supervision of Public Procurement Procedures, which, in the opinion of the authors of the paper, significantly influenced the change in the understanding of the proven competence of an economic operator in a particular public procurement process. Specifically, in the appeal procedure, despite the appellant's seemingly logical arguments, DKOM arrived at a decision that was contrary to the appellant's expectations. In the appeal procedure, the appellant contested the recognition of evidence of technical and professional competence and of the bidder through ongoing professional supervision services, i.e. they were not performed, so they could not be the basis for the requested reference.

The appellant argued that regardless of the fact that the contracting authority did not explicitly state in the procurement documentation that it would only recognize as acceptable completed contracts for professional supervision services, with adequate references, this is clear due to the very nature of the completion of the service provided.

It is indisputable that a "successfully provided service" cannot be measured by the amount of invoices issued until the moment of submission of the bid, but by the proven quality of the service provided. DKOM, and later the High Administrative Court, were of a different opinion, which in fact means that, unless the contracting authority requests otherwise, a successfully performed professional supervision service can be considered any part of the service if the financial amount of such part of the service meets the given criterion. Regardless of the fact that the works on the building over which the professional supervision service is performed are far from being completed, the service that is the subject of an acceptable reference has not been performed.

The question of the correctness of the said decision was raised at a professional seminar led by active DKOM members. When they answered, they once again confirmed that the decision could not have been different, and offered a counter-question as evidence: *Will we dispute the experience of a cleaner who cleans every day, but whose contract for these services has not yet expired?*

Therefore, it is accepted that it is important that you do something for a while (without introducing any kind of time dimension of the observed engagement) and that you are paid for it. Whether you are really good at it, or, as the contracting authority describes, "reliable and experienced" in the performance of services that are the subject matter of procurement, and whether you have the capacity and competence required in accordance with the requirements and restrictions of the subject matter of public procurement, is not important for the formal merits of the matter. Then, the argument is the comparison of the job of a cleaner, who performs the assigned tasks from day to day at the same place at the same time, with the

work of a certified engineer, a job that brings new requirements and new challenges each hour in the process of construction and/or performance of works, tasks that result in the final picture, evaluation and impression of the success of the construction project.

5. Possible directions of change

This paper is not the first in which authors speak and write about the implementation of construction projects in the public sector within the scope of the Public Procurement Act.
The Act has been amended from time to time, and the result of the process of procurement of goods and services and the assignment of works has always yielded the same results, the same messages.
The tenders of economic operators are still based on the price, not on the competitive value of the bid, i.e. on the expectations of the success of economic operators in the realization of the subject matter of procurement, i.e. project tasks. The provisions on minimum competence requirements continue to be reduced to minimum requirements that in no way originate in the actual, tangible project requirements that are the source of the subject matter of procurement and which should be the basis for determining the minimum characteristics and capabilities of economic operators participating in public tenders.
Competencies are based on past indicators, we call them references. References are a consequence of, or should be a consequence of, the results achieved in the performance of services or the delivery of goods or construction or performance of works. They are often the result of the reluctance of public contracting authorities to cause resentment and misunderstandings and to provide references with an assessment of the degree of quality response to project requirements. It all comes down to the message that the service was successfully performed in the required scope. And that's where it stops.
References by their character are not something to be doubted, they just need to be upgraded, expanded on the basis of the programming of the process through which the subject matter of procurement must pass during implementation.
We deduce the future on the basis of the past. This should be justified because it is said that "history is the teacher of life". Experience teaches us that we learn almost nothing from history, and almost never apply what we have learned. All this leads to an obvious conclusion: changes in the understanding, giving and application of past references in the public procurement process are inevitable.
The least possible impact on the behaviour of participants in public procurement is the impact on the behaviour of economic operators, especially those who offer the performance of engineering consulting services. This is not in itself understandable, but, unfortunately, it is permanently present. It is not easy to determine why this is so, but it can be said without beating around the bush that this behaviour is based on several indicators whose intensity of occurrence varies from one economic operator to another. Here we list several possible influences, without trying to determine the hierarchy of these influences:

- fragmentation of the sector of the provision of engineering consulting services
- pressure of present or imminent unemployment
- lack of realistic consideration of the requirements and restrictions of the subject matter of the procurement in the implementation of services
- underestimating the value of the service
- irresponsibility towards project tasks
- lack of professional responsibility
- unfair competition
- corruption.

The usual answer of any economic operator to the question of why this is so will be that it is the response to the state of the market of the services in question, that they are forced to follow the existing trends and adapt their behaviour to the existing trend and that they themselves are completely powerless to change anything. In doing so, they forget about the famous maxim of Jesus: "When considering and evaluating the behaviour of others, start with yourself."
The market generates a ratio of demand and supply, which is the economic maxim on which we build social relations. For the time being there is no rational answer to the question why it does not apply in the case of the market of engineering consulting services, why there is no balance between the value of demand and the value of supply in this market. Perhaps some future thorough research will try to find the right answer to this, in fact, a very simple question. Only the answer is complicated and escapes rational thinking.
The impact of practices of public procurement commissions or committees appointed by contracting authorities is also not negligible. With rare exceptions, the practice is reduced to the preparation of tender documentation in accordance with the requirements of the Public Procurement Act, with a rigid approach in forming specific requirements for the implementation of the subject matter of procurement and avoiding the application of more demanding eligibility criteria for bidders and contract award criteria. The most common justification is that it is the Act that requires low criteria for the evaluation of bids. Then why compete with the most economically advantageous bid if the criteria are such that they can be met by any relevant economic operator?
In its activities, the Appeals Commission is motivated and relies solely on the fulfilment of formal indicators of the public procurement process, whether they are in accordance with the Act, and then with the announcement of a public tender.
However, there are possible directions of change.

Amendments to the existing Public Procurement Act

The existing Public Procurement Act of the Republic of Croatia is not bad, it is not incomplete, in fact, it may be too exhaustive, sometimes too detailed, at the level of an ordinance, so it limits the imagination of beneficiaries and sharply restrains the space of individual and

group responsibility. However, as in every human work, there is room for improvement of the Act. We are focused on the area of possible major improvements to the process of implementing public procurement of engineering consulting services, with the possibility of using the proposed solutions in other public procurements.

Unacceptably low price

The Act treats an unacceptably low price in such a way that its efficient and effective application is realistically and factually excluded. The Act leaves room for proving the justification of an unacceptably low price, in which the arguments are most often at the level of "I can do it for that price"! Thus, an unacceptably low price becomes an acceptably low price through the presented justification, or rather interpretation.

The Act necessarily requires the opening of the process of harmonizing views on the notion of an unacceptable price. If this proves necessary and inevitable, we should apply the time dynamics of adjusting the development of an acceptable model of elimination of an unacceptably low price through three development steps.

Procedure with the lowest price, the first step in improving the process

The provision on the possible explanation of the low price should be abandoned and replaced by a firm provision on the unacceptably low price, which rejects all prices below the acceptable threshold and the bids do not enter into the further evaluation process. The threshold of an unacceptably low price must be determined through a discussion with arguments. In any case, the threshold must be established in relation to the estimated value of the subject matter of the procurement.

Given that the estimated value of the subject matter of procurement has been confirmed in practice as based on arguments and realistically considered, the threshold should be around eighty percent of the estimated value of the subject matter of procurement or more.

Smallest deviation from the median offered price, the second step in improving the process

It is fully justified that the attitude towards an unacceptably low price is based on the assumption that economic operators participating in the public procurement process will not offer prices that are extremely below the estimated value of the subject matter of procurement. Unfortunately, daily practice completely denies this conclusion, so there are examples in the process of offering engineering consulting services where the lowest offered price of the service is at the level of twenty percent of the estimated value of the subject matter of procurement.

In order to overcome the existing situation, the profession proposed the application of the evaluation model of the offered prices by applying the criterion of the smallest deviation from the median offered price. The proposal is reasonable and allows the selection of the best offered price: the best offered price is the one that has the smallest absolute deviation from the median price of all acceptable bids.

Unfortunately, the proposal is only the second step in creating the optimal space for the application of the most economically advantageous price model, because it accepts a drastic dispersion of offered prices, which is not good for any project, especially for construction.

Acceptable price, the third step in improving the process

This model starts from the position that there is simply no justification for any price competition in the field of procurement of engineering consulting services.

The application of tendering with the expected quality of the offered engineering consulting service is the only socially justified procurement model because it allows for very reliable conclusions about the future result of the performed service.

In such a procedure, the contracting authority determines the value, that is, the price of the subject matter of procurement, and invites economic operators to declare whether they accept bidding with quality and with a previously set value of the service. Economic operators declare whether they accept such bidding, and the contracting authority decides on this basis to invite all economic operators who have declared that they accept the set value of the service as a contractual value to participate in bidding with quality. In the event that the majority of economic operators declare that the set price is too low, the contracting authority shall make an adjustment to the given price and again ask economic operators whether they accept the price.

This model, beyond any discussion, is primarily based on the social interest that the contracting authority receives the best possible response to its requirements and restrictions, i.e. the application of the model indicates a very high probability of realization of project goals in accordance with the planned quantities and indicators.

Bid selection criteria

In addition to the criteria required by the Act, and in addition to the criteria of good performance of contracts, it is necessary to add the criteria of good performance of services and the criteria of the planned organization of the implementation of engineering consulting services and the criteria of the planned technology for the provision of services. Additional criteria enable the contracting authority to better examine the competence of bidders and prove that the economic operator understands the requirements and restrictions contained in the subject matter of procurement.

The bid selection criteria in the Act are treated in a way that is not fully consistent in the formation of the space for the establishment and application of criteria, so as an illustration of the necessary changes, not only in the given direction, we quote in italics individual articles and/or paragraphs of the Act with amendments that need to be specifically implemented in the Act.

Article 283

(1) *The bid selection criterion in public procurement procedures shall be the most economically advantageous bid.* [11]

The first paragraph of Article 283 shall be amended to read as follows:

(1) The mandatory bid selection procedure in public procurement procedures shall be based on the application of the model of the most economically advantageous bid.
Explanation: The most economically advantageous bid is not a criterion!

Article 284
(1) *The most economically advantageous bid shall be determined on the basis of the price or cost, using a cost-effectiveness approach, such as life-cycle cost, in accordance with subsection 2 of this section, and may include the best price-quality ratio, which shall be assessed on the basis of criteria, including qualitative, environmental or social characteristics, related to the subject matter of procurement.* [11].
The first paragraph of Article 284 shall be amended to read as follows:
(1) The most economically advantageous bid shall be determined on the basis of the ratio of quality weight and price or cost weight, using a cost-effectiveness approach such as life-cycle cost, in accordance with subsection 2 of this section and shall include the best quality-to-price ratio. The quality criteria, i.e. the requirements and restrictions of the subject matter of procurement, shall include all relevant parameters that directly indicate the qualitative characteristics of the bid, including environmental or social characteristics related to the subject matter of procurement.
Explanation: It is necessary to clearly and precisely define that through the mandatory application of the bid evaluation model of the most economically advantageous bid, a transparent relationship between the qualitative and price value of the bid is established, all in favour of the subject matter of the procurement.
(2) *The criteria referred to in paragraph 1 of this Article may include, for example* [11]*:*
The introductory text of paragraph (2) shall be amended to read as follows:
The quality criteria referred to in paragraph 1 of this Article shall include, but without limitations on other criteria applicable to the subject of procurement:
Explanation:
Due to the hygiene of the stipulated public procurement procedure in terms of evaluating the quality of bids and specifying the obligation of the contracting authority, it is necessary to amend the existing text in the manner proposed.
1. *quality, including technical value, aesthetic and functional features, accessibility, solution for all users, social, environmental and innovative features, and trading and trading conditions* [11]
The first item of the second paragraph of Article 284 shall be amended to read as follows:
1. the technical value of the bid, including:
a) evidence of the economic operator's appropriate experience in accordance with the requirements of the subject matter of procurement
b) evidence of the available human and material capacity of the economic operator to implement the obligations offered in the bid in accordance with the subject matter of public procurement
c) evidence of the financial stability of the economic operator at the time of preparation of the bid
d) evidence of the competence of employees of the economic operator who are planned to implement obligations in relation to the subject matter of public procurement
e) planned organization of the implementation of the obligation of the economic operator in relation to the subject matter of public procurement
f) planned technology for the implementation of the obligation specified in the tender documentation
g) the manner of responding to the assumed project risks that are imminent to the realization of the subject matter of public procurement
h) environmental and innovative features and trading and trading conditions where appropriate.
Explanation: It is necessary to precisely regulate the obligation of the contracting authority in the application of the criteria on the basis of which the qualitative value of the bid is determined.
2. *organization, qualifications and experience of the staff engaged in the performance of a particular contract, if the quality of the staff can significantly affect the level of performance of the contract, or* [11]

The second item of the second paragraph of Article 284 shall be amended to read as follows:
2. individual professional qualifications and adequate experience appropriate to the requirements of the subject matter of procurement of staff engaged in the performance of a particular contract, or
Explanation: The organization of the implementation of the contractual obligations of the economic operator is the obligation of the economic operator, and not the staff engaged in the performance of a particular contract. The quality of the staff has a proven and undeniably significant impact on the level of performance of the contract.
3. *after-sales service and technical assistance, delivery terms and conditions such as delivery date, delivery process and delivery or performance deadline* [11].
The third item of the second paragraph of Article 284 shall be amended to read as follows:
3. after-sales service and technical assistance, if applicable, delivery terms and conditions such as delivery date, delivery process or performance deadline.
Explanation: It is necessary to edit the text in accordance with the request of the message to be given. The delivery date and delivery deadline appear in the text, and the delivery deadline is determined by the date.
(4) *The Contracting Authority may not determine only the price or only the cost as the only criterion for the selection of the bid, in which case the relative weight of the price or cost shall not exceed 90%.* [11].
The fourth paragraph of Article 284 shall be amended to read as follows:
(4) In the evaluation of bids, the Contracting Authority shall use the weights of the quality and price or cost ratio as stipulated in items (a) to (c) of this paragraph:
a) For the assignment of works, the Contracting Authority may not determine only the price or only the cost as the only criterion for the selection of the bid. The relative ratio of the price or cost weight and the quality weight must not exceed 90/10 %.

b) For the procurement of goods, the Contracting Authority may not determine only the price or only the cost as the only criterion for the selection of the bid. The relative ratio of the price or cost weight and the quality weight must not exceed 80/20%.
c) For the procurement of services, in particular engineering consulting services, the Contracting Authority may not determine only the price or only the cost as the only criterion for the selection of the bid. The relative ratio of the price or cost weight and the quality weight must not exceed 20/80 %.

Explanation: The impact of the offered price on the evaluation of the most economically advantageous bid cannot and must not be identical for the assignment of works, procurement of goods or procurement of services, especially not for the procurement of services, because the value of the service directly depends on the actual and factual references of the bidder. The offered price is and must be precisely the result of the competencies of the bidder and their planned investment in the implementation of the service! References require special discussion, but this discussion cannot be the subject of the Act.
Article 286
(1) *The public contracting authority shall determine in the procurement documentation the relative weight assigned to each criterion selected for the purpose of determining the most economically advantageous bid, except when it is determined only on the basis of the price.* [11].

The first paragraph of Article 286 shall be amended to read as follows:
(1) The public contracting authority shall determine in the procurement documentation the relative weights assigned to the quality and price or cost and separately attach the relative weights to each quality criterion used to assess the quality of the bid in the process of determining the most economically advantageous bid.
Explanation: The Act must clearly stipulate the use of weights of individual criteria in the process of bid evaluation. The value of bids is not determined only on the basis of the price.

(2) *Weights may be expressed by determining a range with an appropriate maximum difference, and if weighting is not possible for objective reasons, the contracting authority shall specify the criteria from the most important to the less important* [11].

A new sentence shall be added to the second paragraph of Article 286 and the paragraph shall read as follows:
(2) Weights may be expressed by determining a range with an appropriate maximum difference, and if weighting is not possible for objective reasons, the contracting authority shall specify the criteria from the most important to the less important.
When implementing this requirement, the importance criteria are attached a ranking, so the most qualitatively advantageous bid is the one with the highest total value of the assigned rankings.
Explanation: Given that these are rankings, it is necessary to stipulate that the rankings are evaluated numerically, from the lowest (1) to the highest (5), so that an adequate result is achieved as in the application of weights.

In addition to the amendments to the Public Procurement Act, which is the basic prerequisite for improving the process of public procurement of engineering consulting services, there are also sub-processes in the area of improvement, which we understand as requirements for the profession.

Calming the bidding space in order to achieve a balance between project requirements and possible responses of economic operators
Observed from different positions or ways of thinking and understanding the role and purpose of public procurement of engineering consulting services, a differentiated understanding of the set goal is possible: calming the bidding space.
In order to avoid any doubts regarding such a requirement, we point out that it is, simply and directly, about raising the degree of responsibility of economic operators in the process of offering engineering consulting services in relation to their own ability to adequately respond to the requirements of the subject matter of procurement, i.e. a construction project. It is a long-term and not at all simple process that should be realized through several aspects.
The first aspect is the preparation of tender documentation through which the project requirements must be clearly established, not at the level of minimum requirements for economic operators, but according to the minimum requirements of the construction project. Such requirements will require the economic operator to make a realistic assessment of their capabilities, which may not be in accordance with the business interest, and will affect the decision to bid or not to bid.
The second aspect is the provision of services. The public contracting authorities must, and this must be enabled by the Public Procurement Act, use the right and obligation to terminate the contract for the provision of engineering consulting services to the detriment of the service provider and conclude a contract with another ranked economic operator participating in the conducted tender for the procurement of the service in question, i.e. without opening a new public procurement procedure.
The third aspect is based on the recognition that at the level within the sector and at the level of sectoral compliance, there are no adequate mechanisms that would regulate the space of demand and supply, so it too often happens that the quality capacities of possible responses to the demand of services are insufficient, and this directly leads to a low-quality response to project requirements and to social damage.
The requirement is simple: contracting authorities must align their plans not only with their project capabilities, but also with the assessment of possible quality responses of economic operators to project requirements. The requirement is not simple, but it is realistic.

Improvement of professional responsibility
A not at all unimportant prerequisite for the development or improvement of the public procurement process lies in the area of professional responsibility of the provider of engineering consulting services. It is true that economic operators conclude contracts for the provision of services, but the services are performed by authorized natural persons in accordance with another law.

The monitoring and evaluation of the implementation and results of the performed service is, by the nature of things and legal solutions, the task of architectural and engineering chambers. There is a wide, as yet unused area of progress in the operation of chambers in order to responsibly sanction the professional responsibility of their members. Members of chambers must accept the fact that it is in their personal and professional interest to sanction the poor results of colleagues in the provision of engineering consulting services and that zero tolerance to nepotism must be a leitmotif of their behaviour in the process of evaluation of professional responsibility of colleagues and friends. Only in this way will they help a colleague and friend and the profession as a whole.

Development of professional and material competencies through the establishment of professional competence classes

Somewhere in the statute of one of the associations whose members are companies that offer and perform engineering consulting services, it was written, and maybe it still is, that the association shall establish competence classes among its members. Classes range from the first, least demanding class to the fourth, most demanding class with the toughest and most demanding competencies.

Members of the association voluntarily undergo a competence assessment in accordance with different, weighted criteria.

Belonging to an association and a specific class of competence for the service in question is a reference of the competence of an economic operator for a particular service. In this way, a member of the association can be classified for different services into different competence classes.

For now, this model of establishing a proven and confirmed level of professional and material competencies of economic operators that are members of associations is in a nascent stage of development, but it would be socially justified and purposeful to develop the model and translate it into use value. In this way, membership in associations would be an indisputable and indispensable reference in the participation of economic operators in the process of public procurement of engineering consulting services.

6. Conclusion

The paper discusses and analyses the current practice of implementing the public procurement process in the design, planning and implementation of construction projects with a focus on the public procurement of engineering consulting services.

The quality and timeliness of engineering consulting services directly affect the development and ultimately the success of a construction project. This simply and directly means that through the process of public procurement of engineering consulting services, conditions are created that will inevitably and directly affect the development of the construction project and its final success, i.e. the degree of achievement of project goals.

The implementation of the process of public procurement of services and goods and the assignment of construction and/or performance of works in the Republic of Croatia, in accordance with the Public Procurement Act, is permanently accompanied by dissatisfaction of both public contracting authorities and economic operators.

Public procurement of engineering consulting services is an area of economic and socially responsible activity of procurement participants, where the principle of the most economically advantageous bid is present only in principle, i.e. peripherally, and the procurement is actually conditioned by the lowest price. Thus, such public procurement also results in social damage. Everyone is aware of this practice, without changing anything, and there are too many reasons for change. Enough has been said about it in the paper.

The application of the provision of the Act on the ratio of price weight and quality weight in regular practice is nothing more than competition exclusively by price, so the contracting authorities conclude contracts for the performance of engineering consulting services with the bidder who offered the price of performance of the service which is up to eighty percent lower than the estimated value of the service. This is a direct path to social damage for society, and a devastating practice for the construction consulting profession, which degrades and destroys the engineering profession.

Who is responsible for this? An inadequate Act, but, more importantly, inappropriate and unreasonable behaviour of providers of engineering consulting services in the process of bidding and then an irresponsible attitude of service providers towards contractual obligations.

In the event that due to inadequate behaviour of the service provider they want to terminate the contract, the contracting authorities usually abandon such a solution because they are faced with a new, lengthy and painful procurement process, perhaps again with the same result.

Engineering consulting services, their performance and result are based on knowledge, experience, invention and professional responsibility. Although, there is still too much to do in the area of responsibility.

The task of the engineering profession is to act in a public space, in which the social value of the results of the engineering consulting services performed is evaluated, with a permanent effort to develop professional responsibility.

Today, the process of obtaining a professional license, i.e. the authorization to perform engineering consulting services, is almost automatic, and losing a license is almost unheard of. This must change!

The criteria for assessing the eligibility of bids and the criteria for awarding contracts are established on the basis of minimum requirements (as required by the Act), while knowingly avoiding the application of the criteria actually and essentially relevant to the individual construction project, all in fear that the applied criteria will be challenged in the appeal procedure.

The paper explores in detail and explains the state of practice in the implementation of the process of public procurement of engineering consulting services. It is the existing practice, with its solutions that are realistically beyond the interests of construction

projects, which requires changes in legislation, which too often says that contracting authorities or economic operators can do something.

The Act must state what contracting authorities and economic operators must and must not do, and anything else they can do, if it is in accordance with the important messages of the Act. The legislator must avoid the trap of incorporating into the Act provisions that are imposed as possibly applicable in the preparation of the Act.

Possible changes to the existing practice in public procurement processes can be found in the area of amendments to the existing Public Procurement Act, especially some, now painful provisions:

- unacceptably low prices
- the ratio of the price weight and quality weight
- minimum eligibility criteria
- quality value of the bid in accordance with the interest of the construction project
- adding mandatory criteria of good performance of the contract, good performance of the contracted service, the criteria of the planned organization of the realization of the service, the criteria of the planned technology for the implementation of the service.

According to what we fear is a utopian opinion, laws should reflect a social agreement about an undisputed enduring social interest and as such should not be altered when a ruling party changes.

Then group interests could only be achieved through and limited to a change in ordinances, which is written on the basis of and in accordance with the Act, and in accordance with a group interest limited by the Act.

Unfortunately, today we have the practice of protecting group interest by changing the Act, but this is only a lamentation about tax and is, for now, unrealistic and unachievable.

The implementation of the changes proposed in this paper is a simple and very achievable task for which it is necessary only to define the implementation tasks and who will implement them. Some attempts have already been made in this direction, which have so far been unsuccessful, but failure is not a reason to give up.

The necessary change in the behaviour of economic operators in public procurement processes, especially the procurement of engineering consulting services, is much more demanding, complex and uncertain.

It is up to engineering associations to regulate, in accordance with the laws defining the area of implementation of engineering consulting services, the business and professional responsibility of participants in the development of construction projects in a way that will separate chaff from the grain. In doing so, they must not shy away from proposing changes to existing laws, because laws are but a convention on the basis of which we regulate the space in which socially important interests meet, align and conflict with the interests of groups and/or individuals.

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