



Līga Avena

Legal Problems of Quality Aspect in Public Procurement Contracts

Summary of the Doctoral Thesis for obtaining
the scientific degree “Doctor of Science (*PhD*)”

Sector Group – Social Sciences

Sector – Law

Sub-Sector – Civil Rights

Rīga, 2023



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The Doctoral Thesis was developed at Rīga Stradiņš University, Latvia

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Introduction

When assessing the problems of a law institute, one must always start by translating the relevant legal framework, i.e. studying the legal basis. The field of public procurement has always been subject to constant changes in the application and interpretation of the law, as evidenced by frequent amendments to the law.

As the legal philosopher L. Fuller writes: “The law must comply with the following principles:

- 1) generality;
- 2) openness (accessibility of the law to those to whom it applies);
- 3) predictability of legal action (general prohibition of retroactive effect of the law);
- 4) clarity and comprehensibility of the law;
- 5) inadmissibility of contradictions;
- 6) inadmissibility of unenforceable claims;
- 7) constancy over time (inadmissibility of frequent changes);
- 8) responsibility between official actions and declarable rules.”¹

Accordingly, after studying the frequency and extent of amendments to the regulatory framework of public procurement, it should be concluded that the changes are recognised as significant and do not comply with the principle of inadmissibility of frequent changes. Of course, legislative changes are often initiated taking into account the existing case law.

In the Latvian legal system in 2000, the term “case law” was mentioned for the first time by E. Levits: “Case law is understood as a set of published court judgments that are a primary or secondary source of law in the Western judicial

¹ Broks, J. 2004. *Philosophy of law doctrines, concepts, discourses*. Riga: University of Business “Turība”, 102.

area”, while Professor K. Torgāns² recognises the distinguishing feature of “case law” and “judicial practice” as only by “sets of abstract conclusions” and concludes: “Case law is a set of conclusions on issues of law contained in court rulings (precedents), on the basis of which the court has decided questions about the interpretation of a legal norm, its application in certain factual circumstances or filling gaps in the law”³. On the other hand, legal researcher B. Ruhter explains that “case law is a set of published (mainly higher) court rulings, which are of fundamental importance and contain abstract legal conclusions (prejudices)”⁴. The role of case law in the development of the Public Procurement Law (PPL) institute is significant, because it can be considered that the court not only “finds” the rights, but also “creates” them⁵. This is confirmed by the fact that in the application of public procurement legal norms, the Procurement Supervision Office refers to court judgments, as well as develops guidelines for conducting procurements, taking into account the conclusions expressed in case law. Therefore, it can be assumed that case law is an important source of public procurement law.

However, even more important than the existing legal basis and case law is to understand the purpose and nature of the regulatory acts regulating the industry and activities, why such regulatory acts exist in the first place, what purpose they are intended to achieve, etc. Any use of resources must be effective.

² Levits, E. 2000. The principle of proportionality in public law – jus commune europaeum and the principle of constitutional rank included in the Constitution. *Law and Rights*, No. 9, 263.

³ Plotnieks, A. 2009. *Theory of Law & Legal Method*. Riga: SIA “Izglītības soļi”, 90. See, Torgāns, K. 2005. Jurisprudence theory and applicable jurisprudence. *Jurista vards*. 47 (402), 2-3.

⁴ Neimanis, J. 2004. *Introduction to Law*. Riga: Viļani printing house “Renovata”. See, Ruhter, B. 1999. *Rechtstheorie*. Munich, Beck, Rn., 235, 71.

⁵ Krastiņš, I. 1997. *Doctrine of Law 2nd edition*. Printed in the LU printing house, 36.

Also, the Law on Prevention of Squandering of the Financial Resources and Property of a Public Person⁶ stipulates that financial resources and property must be handled efficiently, actions must be such that the goal is achieved with the least use of financial resources and property, and the property can be acquired for ownership or use at the lowest possible price, however, practice shows that it is difficult to realise all the goals of Public Procurement Law (PPL) simultaneously. For example, the fact that the provisions of PPL – the obligation to ensure free competition of suppliers and the obligation to ensure the efficient use of state and local government funds – compete with each other was the subject of disputes in a case that was considered by the Department of Administrative Cases of the Senate of the Supreme Court of the Republic of Latvia in the judgment of 11 January 2013 SKA-58/2013. In the specific case, the Procurement Monitoring Bureau believes that priority should be given to the customer's obligation to ensure the efficient use of state and local government funds, while the applicant believes that the rule ensuring free competition of suppliers was not followed. In its reasoning, the Senate states that the first part of Article 17 of the Public Procurement Law stipulates that the technical specifications of the procurement subject are included in the procurement procedure documents. Technical specifications ensure equal opportunities for all bidders and do not unduly restrict competition in procurement procedures. This norm reflects the basic principle of public procurement law, from which follows the requirement to ensure equal treatment in the award of the procurement subject, which would exclude unfair competition between bidders and the granting of previously known advantages to one particular bidder over another

⁶ Law of the Republic of Latvia "The Law on Prevention of Squandering of the Financial Resources and Property of a Public person" 02.08.1995. *Latvijas Vēstnesis*. 114.

competitor. In this way, the main goal of the public procurement regulation is achieved – saving public funds.⁷

Here, however, the author wants to draw attention to the fact that saving public budget funds should not be the main goal. The public budget is created and should be used with only one goal – to realise public interests in the most efficient and high-quality way. And the public administration is actually both the decision-maker and the executor for the realisation of these interests, including by using public resources. Public entities, derived public persons, etc., which meet the characteristics of the status of the customer specified in the regulations, must comply with the requirements of the regulatory acts regulating public procurement in the use of resources. Public-private partnership is also one of the legal instruments for implementing public procurement. Innovative approaches in order to ensure compliance with the principles of sustainability, ecology, etc. are also appearing periodically in the industry. Public procurement in Latvia has been studied by several authors, e.g. A. Kriviņš⁸, U. Skrastiņa⁹. However, there has been no in-depth research and analysis of the quality aspect, which is the basis both for the determination and evaluation of the criteria and for the conformity or non-conformity of the contract performance with the public interest. The potential of sharing institutional resources between sectors, its practical and legal aspects to ensure the efficiency and quality assurance of public administration in all its dimensions through public procurement as a legal

⁷ Judgment of the Administrative Affairs Department of the Senate of the Supreme Court of the Republic of Latvia of January 11, 2013 in the case SKA-58/2013., 5.1. and paragraph 7. http://www.tiesas.lv/files/AL/2013/01_2013/11_01_2013/AL_1101_AT_SKA-0058-13.pdf

⁸ Kriviņš, A. 2014. Prevention and combating of corruption in the field of public procurement: doctoral Thesis. Rīga Stradiņš University, Rīga, 309.

⁹ Skrastiņa, U. 2013. Criteria for selection and evaluation of tenders in public procurement: doctoral thesis. Rīga: BA Turība, 302.

institute, has not yet been evaluated. Therefore, the specific study is an original study of the author.

Aim of the Thesis

To reveal all the essential dimensions of quality and the legal issues of their implementation in public procurement contracts, providing practical and science-based recommendations for improving quality assurance in public procurement.

In order to achieve the aim and to limit the topic, in-depth attention is paid to the field of construction, as it includes both the supply of goods and services, thus making it possible to identify all the dimensions of quality that are essential in public procurement of both goods and services.

The study analyses the aspects of quality in a multidisciplinary section, revealing the conformity of quality, both as an element of the customer's requirements and of the performance of the contract, with the purpose of public procurement, translating the binding legal norms, both with different methods of interpreting legal norms and evaluating them through the prism of economic theories.

Tasks of the Thesis

- 1) To research and analyse the historical development and nature of public procurement as a legal institute;
- 2) To find the definition of the concept of quality through a multidisciplinary approach, identifying all the dimensions of quality that are relevant to society as an end user;

- 3) To study the concept of quality in construction, to analyse the legal issues of quality and possible legal institutes for quality assurance;
- 4) To study the legal aspects of damages in the context of quality inconsistency in construction contracts.

Research questions of the Doctoral Thesis:

- 1) Is the concept of quality defined in the sphere of public procurement and construction?
- 2) What are the quality elements and quality dimensions that should be evaluated when using public financial resources?
- 3) How to determine the best price-quality ratio when evaluating bids in public procurement?

Research object of the Thesis – elements of quality in the field of public procurement.

Subject of the Thesis: the legal regulation of the determination, evaluation and application of quality assessment criteria in public procurement contracts.

Methods of data acquisition and processing (analysis)

In order to fulfil the tasks of the dissertation and achieve the goal of the research, the author studied the general theoretical and specialised literature in the field of public procurement problems. The following data acquisition methods were used in the development of the Doctoral Thesis:

- 1) analysis and synthesis – court statistics, press review, discourse analysis;
- 2) analysis of legal literature;
- 3) modelling (case-theoretic modelling);
- 4) observation (observations made during daily work).

Novelty of the Thesis

The practical and legal aspects of the sharing of cross-sectoral institutional resources within the framework of public-private-human-science partnership in order to ensure the efficiency and quality assurance of public administration in all its dimensions through public procurement as a law institute have not been analysed so far. The concept of quality in public procurement and the procedural tools for ensuring it throughout the life cycle of the procurement object have also not been studied in depth. The public-private partnership based on the Quadruple Helix Concept (QHC) as a legal institution has not been assessed and analysed for its feasibility, taking into account legal and practical limitations.

Approval of the results of the Doctoral Thesis. The author has published a total of 6 scientific papers on the research topic:

1. Līga Velve, Aigars Evarldsons **“Price Restrictions in Public Procurement”** Baltic Legal Journal, ISSN 1691-0702.
2. Līga Velve **“Quality criterion in public procurement of construction works”**, included in the collection of theses of the April 23, 2015 international scientific conference of RSU.
3. Līga Velve **“Aspects of a multidisciplinary approach to understanding the concept of quality in public procurement”** Part II of the international scientific conference “Social sciences for regional development 2016”: CURRENT PROBLEMS OF STATE AND LAW. pp. 236-245. Included in the database: Electronic Journals Library of University of Regensburg, 2016. ISSN 2255-8853.
4. Līga Avena **“Social responsibility as a component of tender assessment within the public procurement process”**, Proceedings of the 61st international scientific conference of Daugavpils University, Included in the database: EBSCOhost, 2019

5. Inga Uvarova, Dzintra Atstaja, Viola Korpa, Liga Avena, Miks Erdmanis **“End-of-life Tire recycling: going beyond to new circular business models in Latvia”**. SCOPUS Engineering for Rural Development, Volume 19, 2020, Pages 1680-1691. DOI: 10.22616/ERDev.2020.19.TF435
6. Liga Avena, Janis Grasis **“Legal instruments how to involve end user or public in the public procurement contract adaptation to future needs”**. Submitted and accepted for publication in the magazine “Access to science, business, innovation in digital economy” in June 2023. The journal is indexed in the Web of Science database. DOI: [https://doi.org/10.46656/access.2023.4.3\(3\)](https://doi.org/10.46656/access.2023.4.3(3))

The results of the Doctoral Thesis have been presented at 11 conferences, 9 of which are international scientific conferences

1. Participation in the international scientific and practical conference “Science. Rights. Stability” 23.04.2014. with the report **“Limitations of price policy in public procurement”**.
2. Participation in the April 23, 2015 international scientific conference of Riga Stradiņš University “Current problems of strengthening security: political, social, legal aspects” with the report **“Quality criterion in public procurement of construction works”**.
3. Participation in the November 26, 2015 scientific and practical conference of Riga city municipality “Open municipality” with the report **“The principle of openness in public procurement”**.
4. Participation in Latvia’s annual practical conference “Public Procurement 2020” with the report “The best quality-price ratio and results-based investments in standard public and PPP procurements”.
5. Participation in the ENGINEERING FOR RURAL DEVELOPMENT conference. Jelgava, 20.-22.05.2020 with the report Inga Uvarova, Dzintra Atstaja, Viola Korpa, Liga Avena, Miks Erdmanis **“End-of-life Tire recycling: going beyond to new circular business models in Latvia”**.

6. Participation in the international conference with the report on the topic **“Adoption of 4P and circular economy principles in the public objects of national significance”**. Estonian entrepreneurship university of applied sciences, 9th Annual Entrepreneurship and Innovation Conference “Building the virus-resistant company” October 2021.
7. Participation in the 2021 international scientific conference of Riga Stradiņš university “Current problems of the legal system” with the report “Practical and legal aspects of cooperation between a public person and a private person for the implementation of activities important to society”.
8. Participation in the 2022 international scientific conference of Riga Stradiņš university “Current problems of the legal system in the context of the centenary of the Constitution” with the report “Legal aspects of public involvement in QHC-based PPP implementation in the context of Article 101 of the Constitution”.
9. Participation in the international conference GREEN DIET: Tallinn, October 2022, with the report “Concept of quality in construction, practical and legal aspects”.
10. Participation in the EUMMAS A2S Conference (**EUMMAS A2S Conference on Global Social and Technological Development and Sustainability, February 2023 Dubai, UAE**) on global social and technological development and sustainability, organised by an academic consortium that includes almost 30 foreign universities from more than 20 countries. The theme of the EUMMAS Dubai 2023 conference is “Science, Business and Policy Makers in the Emerging New World”. The report was presented, and an article submitted for publication on the topic **“Intersectoral institutional resource sharing within public-private-people-science partnership to ensure the efficiency and quality of public governance”**.

11. Participation in the 2023 World Congress of Latvian Scientists with a stand report “**Determining the best price-quality ratio in public procurement**”

The Doctoral Thesis has been discussed at the meeting of the Doctoral Council of Rīga Stradiņš University.

The structure of the Thesis. The work consists of an introduction, 5 chapters, summary, annotations, list of used literature and appendices.

Description of literature and legal sources. Monographic literature, scientific articles, sociological studies are widely used in the creation of the Doctoral Thesis. In total, 323 sources have been used in the work, including regulatory acts, practice materials, court rulings, etc. The Doctoral Thesis uses the works of theorists L. Abbott (1955), J. Bramanis (2013), E. G. Carayannis, T. D. Barth, D. F. Campbell (2012), B. A. Carrol (1979–1999), P. B. Crosby (1979), J. M. Juran (1974–1995), K. Torgāns, F. Ulbrich (2006), and others.

Theoretical and practical significance of the study

The research is interdisciplinary, taking into account the insights obtained by analysing the practical and theoretical aspects of the research object both through the prism of legal science and macro- and micro-economics, thus providing a comprehensive assessment and also providing practical recommendations and proposals for improving the efficiency of the industry and law institutes related to the topic.

1 Concise outline of the Thesis

1.1 Methods used in the study

Classical research methods were used during the development of the Thesis – analytical research method, historical research method, comparative research method, theoretical modelling research method.

In order to obtain information for conducting the research, the analysis of scientific literature and regulatory acts, the analysis of international experience and modelling were carried out.

The grammatical method of interpretation of legal norms was used to analyse the syntactic structure of public procurement and binding legal norms, studying the terms used, as well as looking for connections between individual members of the sentence in order to understand what the legislator wanted to regulate by using specific terms, word combinations, sentence structure and links, defining the best price-quality ratio as a target criterion in public procurement.

The historical method of interpretation of legal norms is used to reveal the historical development of public procurement as a legal institution, clarifying the meaning and goals of binding legal norms, taking into account the circumstances in which they were created.

The teleological interpretation method is used to clarify the meaning of legal norms regulating public procurement, based on the goal to be achieved by the respective legal norm.

The systemic interpretation method is used to clarify the meaning of legal norms regulating public procurement in relation to other norms regulating the activities of public persons in relation to the use of resources.

The comparative research method has been used, looking at the quality aspects in the implementation of public procurement contracts, in order to provide proposals for improving the regulatory framework of the Republic of Latvia. The development of public procurement was identified using the historical research method, which was necessary in order to offer more effective solutions for determining and implementing quality criteria in modern public procurement in Latvia.

In addition, an empirical study using qualitative research methods (content analysis) was carried out as part of the Doctoral Thesis. The research methodology includes a conceptual study¹⁰ using a literature review¹¹, including dialectical research, analysis of normative, jurisprudence, doctrinal, theoretical and scientific sources, interpretation in the context of historical and current regulations, evaluation of the prevailing consensus, legal and technical synthesis. Used content analysis for PPP, public procurement, quality criteria, public administration and other terms, with an emphasis on logical content analysis.

The case studies examined whether regulations and theoretical approaches work in practice, whether they correspond to desired political, economic, legal and practical goals, or whether individual proposals could work, taking into account other significant differences in legislation and relevant economic systems¹². The object of the case study was identified during stakeholder discussions.

¹⁰ Summers, R. 1966. The New Analytical Jurists. *New York University Law Review*, 865.

¹¹ Tranfield, D., Denyer, D., Smart, P. 2003 Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review. *British Journal of Management*, 207–222. doi: 10.1111/1467-8551.00375

¹² Van Hoecke, M. 2011. *Methodologies of Legal Research – Which Kind of Method for What Kind of Discipline?* Oxford and Portland, OR: Hart Publishing. <http://dx.doi.org/10.5040/9781472560896.ch-001>

Conclusions based on facts, following Occam's razor^{13, 14} principle, which is the most suitable principle for solving problems, giving simple answers to maintain relevance until the objective situation of actual circumstances changes. According to this principle, competing hypotheses about the same question are put forward, choosing the solution with the fewest assumptions, i.e. the solution least likely to be affected by dynamic variables. Analysis and synthesis methods are used in the development of conclusions and recommendations.

1.2 Main results of the study

1.2.1 Historical and legal aspects of public procurement

The purpose of public procurement today is related to the efficient use of public funds. And efficiency is undeniably related to quality, therefore, when translating legal norms in the field of public procurement, it is important to use not only the classically applied grammatical interpretation method, but also methods such as teleological, which clarify the meaning of the legal norm based on a useful and fair purpose, which must be achieved with the relevant legal norm¹⁵, as well as the historical method of interpretation, i.e. clarifying the meaning of the legal norm, taking into account the circumstances on the basis of which it was created.

The author concludes that outsourcing, public-private partnerships and risk management are not just modern phenomena. The need for some kind of procurement policy and practice is related to the formation of various organisations and their bureaucracies. The historical development of public

¹³ Occam razor principle meaning. https://dbpedia.org/page/Occam%27s_razor

¹⁴ Mārtinsons, K. 2016. Science and research: questions for orientation. From: *Research: Theory and Practice*. Martinson, K., Pipere, A., Kamerade, D., sc.red. Riga: Raka, 34.

¹⁵ Law of the Republic of Latvia "Administrative Process Law". 14.11.2001. *Latvijas Vēstnesis*. 164 (2551).

procurement is also related to the need for standardised procedures and documentation, as well as transparency of public sector decisions and actions, which is one of the basic principles of the public procurement system in Latvia today. However, comparing the bureaucratic procedures of public procurement today and historically, we have to conclude that they are practically incomparable, because if initially the procedure applied to public procurement was more symbolic, without any specific procedural order, then nowadays this order is regulated and determined by a series of regulatory acts. The important principles of public procurement, such as transparency, openness, equality, etc. often prevail over the efficiency of the use of financial resources.

The path of development and evolution of public procurement as a legal institute has been long, however, from the very beginning, public procurement has had as its main objective the efficient use of the client's funds, minimising the client's risk as much as possible. In order to achieve this objective, it is therefore necessary to understand the substantive framework of the concept of "effective use", taking into account the origin of the funds, as well as identifying the potential risks of the customer.

1.2.2 Aspects of a multidisciplinary approach to understanding the concept of quality in public procurement

Until now, the "most economically advantageous offer" has often been used as the criterion for awarding public procurement contracts. According to the EU Directive 2014/24/EU¹⁶ (hereinafter – the Directive), the concept of "*best price-quality ratio*" was introduced in the field of public procurement, which according to point 89 of the preamble of the Directive, should be used in advance

¹⁶ Directive 2014/24/EU of the European Parliament and of the Council (26 February 2014) on public procurement and repealing Directive 2004/18/EC. 28.3.2014. *Official Journal of the European Union*, L 94/65.

instead of the aforementioned concept used in Directives 2004/17/EC¹⁷ and 2004/18/EC¹⁸. Taking into account that the mentioned concept of “the best price-quality ratio” in the field of public procurement is relatively new, and has not been and is not further explained in legal regulations, it is important to study the substantive framework of this concept, i.e. not only to explain it in the sense of the Directive, but also to evaluate the essence of the words included in the concept, using a multidisciplinary approach. Because public procurement is a process that is carried out in the interests of the customer, but the customer essentially acts in the public interest. So the material and social interests of society collide with the material and legal interests of the customer. And the material interests of both parties are essentially characterised or influenced by the binding industry of the subject of procurement.

Understanding the concept of quality

In the documentation of the public procurement procedure and in the resulting contract, there will always be a requirement to ensure quality performance of the contract, or in the documentation of the procurement procedure, the customer often states that he will evaluate not only the offered contract price, but also the quality of the offered performance of the contract. In accordance with the regulatory framework, compliance with criteria that are not and cannot be related to the specific procurement item cannot be evaluated in the procurement procedure. Thus, it can be concluded that the concept of quality

¹⁷ Directive 2004/17/EC of the European Parliament and of the Council which coordinates procurement procedures applied by entities operating in the water supply, energy, transport and postal services sectors. 30.04.2004. *Official Journal of the European Union*, L 134, [not valid].

¹⁸ Directive 2004/18/EC of the European Parliament and of the Council on how to coordinate the procedure for awarding the right to conclude public contracts for construction works, public contracts for supply and public contracts for services. 30/04/2004. *Official Journal of the European Union*, L 134, 30/04/2004 0114 – 0240 [not valid].

does not differ at different stages of the procurement process up to the moment of performance, i.e. the quality compliance indicators specified in the bid should not differ in nature from the quality compliance indicators identified during the performance of the contract.

There are no comprehensive studies in the academic literature on the concept of quality and its understanding. Scholars from four disciplines – philosophy, economics, marketing and operations management – have looked at the mentioned concept, but each group has approached it from a different point of view. *Philosophers* have focused on questions of formulation; *economists* – on profit maximisation and market balance; *marketers* – on the determinants of buying behaviour and customer satisfaction; and *production process managers* – on engineering practice and production control. As a result, competing perspectives have emerged, each based on a different analytical framework and each characterised by its own terminology.¹⁹

If the concept of quality is to be studied in the field of public procurement, the author believes that a complex study of this concept is necessary, taking into account its content framework from the point of view of philosophical, economic, marketing, and also production efficiency. Garvin (1984) has identified five main approaches to the definition of quality:

- 1) *transparent (transcendental)* approach of philosophy;
- 2) *product-based* approach of economics;
- 3) *user-based approach* of economics, marketing and production management;
- 4) manufacturing-based approach;
- 5) *value-based* approaches of production management.²⁰

¹⁹ Garvin, D. A. 1984. What Does “Product Quality” Really Mean? *Magazine: Fall 1984*, October 15.

²⁰ Garvin, D. A. 1984. What Does “Product Quality” Really Mean? *Magazine: Fall 1984*, October 15.

Several authors have tried to explain the concept of quality using the transcendental approach. R. M. Pirsing (1974) believes that “Quality is neither mind nor matter, but a third entity independent of the two ... even though Quality cannot be defined, you know what it is”. Whereas in B. W. Tuchman’s (1980²¹) view, quality is “... a condition of excellence implying fine quality as distinct from poor quality..... Quality is achieving or reaching for the highest standard as against being satisfied with the sloppy or fraudulent.”²² But according to S. Buchanan (1948), quality “is both an absolute and universally recognised sign of uncompromising standards and high achievement.” However, representatives of this view claim that quality cannot be precisely defined, rather it is a simple, non-analysable qualitative trait that we learn to recognise only through experience.²³

Evaluating the definitions of the mentioned authors, in the author’s opinion, the transcendental approach to formulating the substantive framework of the concept of quality in the field of public procurement is not suitable, as it abstracts from the need to formulate a defined substantive framework, which in public procurement is actually a prerequisite for the selection and application of comprehensible evaluation criteria.

The product-based approach of economics was characterised by L. Abbott (1955), who defined: “Quality differences are considered to be differences in the amount of a certain component or quality feature.”²⁴ On the other hand, in the view of K. B. Leffler (1982): “Quality refers to the amount of

²¹ Pirsig, R. M. 1974. *Zen and the Art of Motorcycle Maintenance*. 185, 213.

²² Tuchman, B. W. 1980. *The Decline of Quality*. *New York Times Magazine*. November 2, 38.

²³ Buchanan, S. 1948. *The Portable Plato*. New York: The Viking Press, 5.

²⁴ Abbott, L. 1955. *Quality and Competition*. Columbia University Press. First Edition, 26–127.

non-evaluable properties that are present in each unit of the evaluated quality feature.”²⁵

Product-based definitions are quite different. They see quality as a precise and measurable variable. In this view, differences in quality reflect differences in the amount of a component or quality characteristic of a product.²⁶ ²⁷Product-based definitions of quality originally appeared in the economics literature, where they were rapidly incorporated into theoretical models. In fact, the original economic research on quality focused almost exclusively on durability simply because it fit so easily into the above framework.²⁸ ²⁹ ³⁰ ³¹ ³²

According to D. A. Garvin (1984), such an approach leads to two obvious conclusions. First, higher quality can only be achieved at a higher cost, since quality reflects the amount of quality features a product contains, and since quality features are perceived to be expensive to produce, higher quality goods will be more expensive. Second, quality is considered to be an inherent quality of the goods, not something that has been assigned to them. Because quality reflects the presence or absence of measurable quality characteristics of

²⁵ Leffler, K. B. 1982. Ambiguous Changes in Product Quality. *American Economic Review* (December), 956.

²⁶ Abbott, L. 1955. *Quality and Competition*. Columbia University Press. First Edition, 26–127.; Lancaster, K. 1971. *Consumer Demand: A New Approach*. New York: Columbia University Press, 122.

²⁷ Leffler, K. B. 1982. Ambiguous Changes in Product Quality. *American Economic Review* (December), 956.

²⁸ Levhari, D., Srinivasan, T. N. 1969. Durability of Consumption Goods: Competition versus Monopoly. *American Economic Review* (March), 102–107.

²⁹ Schmalensee, R. L. 1970. Regulation and the Durability of Goods. *Bell Journal of Economics and Management Science*, 54–64.

³⁰ Swan, P. L. 1970. Durability of Consumption Goods. *American Economic Review* (December), 884–894.

³¹ Swan, P. L. 1971. The Durability of Goods and the Regulation of Monopoly. *Bell Journal of Economics and Management Science*, 347–357.

³² Saving, T. R. 1982. Market Organization and Product Quality. *Southern Economic Journal* (April), 856.

a product, it can be objectively assessed and is based on multiple components, not just preferences.³³

Evaluating the mentioned explanations in the context of the purpose and understanding of public procurement today, a direct link can be found between the concept of “product-based” quality and the technical specifications of the procurement item defined by the customer, i.e. the parameters that the offered product must meet. In addition, taking into account the current problem in the field of public procurement related to the development of a procurement procedure and technical specifications that would allow the customer to purchase the highest quality product, one cannot disagree with D. A. Garvin’s opinion that higher quality goods will be more expensive, so it can be concluded that using the offered contract price as the most important evaluation factor criterion, there is little chance of getting the best quality of the offers. According to the author, this justifies the need for a fundamental change in the approach to the evaluation of procurement bids, giving priority to the quality criteria rather than the offered contract price. Moreover, considering that the purpose of public procurement is the efficient use of the client’s funds and the client, as a public person, acts in principle in the public interest, it would be insufficient to use only a “product-based” approach in formulating the substantive framework of quality in public procurement, as the public interest, i.e. the interest of the actual user, should be taken into account.

Such public interests derive most directly from the “*user-based*” approach, according to which several authors have defined the concept of quality. For example, C. D. Edwards (1968) believes that “Quality consists in the ability to satisfy wants...”.³⁴ A similar definition has been given by H. L. Gilmore

³³ Garvin, D. A. 1984. What Does “Product Quality” Really Mean? *Magazine: Fall 1984*, October 15.

³⁴ Edwards, C. D. 1968. The Meaning of Quality. *Quality Progress*. October, 37.

(1974), saying that “Quality is the degree to which a given product satisfies the wants of a given buyer”.³⁵ A. A. Kuehn and R. L. Day (1962) also take a similar view: “In end-of-market analysis, the quality of a product depends on how well it fits the desired patterns of the consumer.”³⁶ But in the view of J. M. Juran (1988) “Quality is fitness for use.”³⁷

User-based definitions start from the opposite premise that quality is “in the eye of the beholder”. It assumes that individual consumers have different wants or needs, and the products that best satisfy their preferences are those that they perceive to be of the best quality.³⁸ This is an idiosyncratic personal view of quality and is highly subjective. In the marketing literature, this has led to the view of “ideal points”, precise combinations of product quality features that provide the greatest satisfaction to a certain consumer, in the³⁹ economics literature – to the view that quality differences are captured by the shift in the product demand curve,⁴⁰ and in the production management literature – to “of the concept of “suitability of use””.⁴¹

³⁵ Gilmore, H. L. 1974. Product Conformance Cost. *Quality Progress*. June, 16.

³⁶ Kuehn, A. A., Day, R. L. 1962. Strategy of Product Quality. *Harvard Business Review*. November–December, 101.

³⁷ Juran, J. M., ed. 1988. *Quality Control Handbook*. McGraw-Hill (Tx); 4th edition (August), ISBN-13: 978-0070331761, 2 (1774 p.).

³⁸ Edwards, C. D. 1968. The Meaning of Quality. *Quality Progress*. October, 36–39.; Kuehn, A. A., Day, R. L. 1962. Strategy of Product Quality. *Harvard Business Review*. November–December, 100–110.

³⁹ Johnson, R. M. 1971. Market Segmentation: A Strategic Management Tool. *Journal of Marketing Research*. February, 13–18; Kotler, P. 1971. *Marketing Decision Making: A Model Building Approach* (New York: Holt, Rinehart and Winston), 491–497; Ratchford, B. T. 1975. The New Economic Theory of Consumer Behavior: An Interpretive Essay. *Journal of Consumer Research*. September, 65–75.

⁴⁰ Chamberlin, E. H. 1953. The Product as an Economic Variable. *Quarterly Journal of Economics*. February, 1–29; Dorfman, R., Steiner, P. O. 1954. Optimal Advertising and Optimal Quality. *American Economic Review (December)*, 822–836; White, L. J. 1972. Quality Variation When Prices Are Regulated. *Bell Journal of Economics and Management Science (Autumn)*, 425–436.

⁴¹ Juran, J. M., ed. 1974. *Quality Control Handbook*, 3rd ed. New York: McGraw-Hill, 2; Gilmore, H. L. 1974. Product Conformance Cost. *Quality Progress*. June, 16–19.

Analysing the mentioned definitions, it can be found that they all have a common focus on satisfying the needs of the consumer. However, since different consumers may have different expectations, or desires, regarding product quality, even reliably objective characteristics may be subject to different interpretations. According to R. B. Yepsen (1982), “Today, durability is considered an important element of quality. Products with a long life are preferred over those that wear out quickly. This has not always been the case: until the late nineteenth century, durable goods belonged mainly to the poor, only the rich could afford fine products that often needed to be replaced or repaired.⁴² This resulted in a long-term association between durability and lower quality, a view that only changed with the mass production of luxury goods as a result of the Industrial Revolution.⁴³ On the other hand, in the 21st century, the focus of both the consumer and the customer is on sustainability.

This is confirmed⁴⁴ by what is indicated in point 2 of the preamble of the Directive that “... public procurement is important, as it is one of the market instruments that can be used to achieve smart, sustainable and inclusive growth, while ensuring the most efficient use of public sector funds.” On the other hand, Article 74 of the Directive stipulates that “The technical specifications drawn up by public purchasers need to allow public procurement to be open to competition as well as to achieve objectives of sustainability. To that end, it should be possible to submit tenders that reflect the diversity of technical solutions standards and technical specifications in the marketplace, including those drawn up on the basis of performance criteria linked to the life cycle and

⁴² Yepsen, R. B., ed. 1982. *The Durability Factor* (Emmaus, PA: Rodale Press), 12–15.

⁴³ Garvin, D. A. 1984. What Does “Product Quality” Really Mean? *Magazine: Fall 1984*, October 15.

⁴⁴ Directive 2014/24/EU of the European Parliament and of the Council (26 February 2014) on public procurement and repealing Directive 2004/18/EC. 28.3.2014. *Official Journal of the European Union*, L 94/65.

the sustainability of the production process of the works, supplies and services.” Thus, it can be established that the indication included in the Directive can be realised in principle, using an approach based on both the product and the user, as well as the production process, in defining the substantive framework of the concept of quality, because only in this way is it possible to ensure the sustainability mentioned in the Directive.

Analysing the “manufacturing-based approach”, in the author’s opinion, the mentioned approach can be different when evaluating the manufacturing process or the manufacturing result. Because, according to various authors, the manufacturing-based approach is basically related to the organisation of the production processes to ensure the quality of the final product, thus providing the opportunity to meet the buyer’s requirements, as well as to optimise the costs of the manufacturing process. As B. Crosby (1979) states, “Quality [means] conformance to requirements”.⁴⁵ But in the view of Harold L. Gilmore (1974) “Quality is the degree to which a given product conforms to a design or specification.”⁴⁶ G. Boehm (1963) states that “although this approach recognises the customer’s interest in quality, a product that deviates from specifications is likely to be poorly made and unreliable, less satisfying than one that is properly made, its main focus is internal. Quality is defined as the way that simplifies engineering and product control. In terms of design, this has led to an emphasis on engineering safety.”⁴⁷ J. Campanella and F. J. Corcoran (1982) believe that “According to the manufacturing-based approach, improvements in quality

⁴⁵ Crosby, P. B. 1979. *Quality Is Free*. New York: McGraw-Hill. ISBN 0-07-014512-1. <http://www.ebacs.net/pdf/orgdesign/8.pdf>, 15.

⁴⁶ Gilmore, H. L. 1974. Product Conformance Cost. *Quality Progress*. June, 16–19.

⁴⁷ Boehm, G. 1963. Reliability Engineering. *Fortune*, April, 124–127.

(equal to numerical reductions in deviations) lead to lower costs of eliminating defects, which are considered lower than correcting them or recall.”⁴⁸

Summarizing and evaluating the opinions of the above-mentioned authors, it can be concluded that the “manufacturing-based approach” actually focuses on the aspects of the technological process of production, which thus ensures product compliance with specifications and reduces the risk of non-compliance and errors. However, when evaluating the suitability of the mentioned approach for creating a substantive framework for the concept of quality in public procurement, according to the author, the mentioned approach focuses more on the technological process and result of production, but in principle does not take into account aspects related to the sustainability of the environment and social aspects.

According to the wording of the concept, it would seem that it could be concluded that the “*value-based*” approach could include the sustainability of the mentioned environmental and social aspects, however, it is necessary to clarify the essence of this approach. As R. A. Broh (1982) explains, “Quality is the degree of excellence at an affordable price and the control of variety at an affordable cost.”⁴⁹ On the other hand, A. V. Feigenbaum (1991) believes: “Quality means the best for a given buyer’s circumstances. These conditions are (a) the actual use and (b) the selling price of the product.”⁵⁰ According to the mentioned authors, quality is defined by cost and price. According to this view, a quality product is one that provides performance at an acceptable price, or conformance to a standard at an acceptable cost. D. A. Garvin (1984) also stated: “Although ingredients and materials were considered key indicators of quality in

⁴⁸ Campanella J., Corcoran, F. J. 1983. Principles of Quality Costs. *Quality Progress*. April, 21.

⁴⁹ Broh, R. A. 1982. *Managing Quality for Higher Profits*. New York, NY etc.: McGraw-Hill, 3.

⁵⁰ Feigenbaum, A. V. 1991. *Total Quality Control*. McGraw-Hill, 1.

categories such as food, clothing, personal care and beauty products, reflecting a product-based approach, the final conclusion of the study was that “there is a tendency to talk about quality more and more, as well as to perceive it in terms of price.”⁵¹

Evaluating the definition of the “value-based” approach, one comes to the conclusion that, in principle, it is only related to the value of the product in material terms, or the price. If we evaluate⁵² the prioritisation of the important environmental and social aspects in public procurement emphasised in the Directive, then it can be established that the “value-based approach” in defining quality requirements in public procurement is essentially unusable, because it is not justified to establish the qualitative characteristics of the offer, taking into account its price on the market. In addition, as stated⁵³ in paragraph 90 of the preamble of the Directive, “In order to promote the orientation towards higher quality in public procurement, Member States should be allowed to prohibit or limit the use of price-only or cost-only criteria to evaluate the most economically advantageous offer, if they consider it appropriate”.

The author agrees with D. A. Garvin’s (1984) opinion that the difficulty in using this approach lies in combining two related but different concepts. Quality, which is a measure of excellence, is compared to price, which is a measure of value. The result is a combination that lacks well-defined boundaries and is difficult to apply in practice.⁵⁴

⁵¹ Garvin, D. A. 1984. What Does “Product Quality” Really Mean? *Magazine: Fall 1984*, October 15.

⁵² Directive 2014/24/EU of the European Parliament and of the Council (26 February 2014) on public procurement and repealing Directive 2004/18/EC. 28.3.2014. *Official Journal of the European Union*, L 94/65.

⁵³ Directive 2014/24/EU of the European Parliament and of the Council (26 February 2014) on public procurement and repealing Directive 2004/18/EC. 28.3.2014. *Official Journal of the European Union*, L 94/65.

⁵⁴ Garvin, D. A. 1984. What Does “Product Quality” Really Mean? *Magazine: Fall 1984*, October 15.

In general, it can be concluded that each of the main approaches to understanding the concept of quality has a common problem. Each approach is uncertain and imprecise when it comes to characterising the basic elements of product quality, respecting the needs of modern society.

In the the author's opinion, according to the needs of modern society and the need to ensure socio-economic sustainability, such a fundamentally new approach can be distinguished, such as "the approach based on societal values" or "the approach based on social responsibility", which in principle includes both the previously analysed approaches, all of which are focused on ensuring quality, including the compliance of the product with the needs of the customer and society (technical quality), as well as the positive impact of the product production process on the environment and society's quality of life (social quality).

Social responsibility as a dimension of quality

The rationality and efficiency of the use of public funds is one of the most important issues discussed in society all over the world. Especially in times of economic instability, the society pays special attention to the use of state funds, often discovering new problematic issues. At a time when the guiding principle of the use of public funds is the effective provision of public needs, it is important to evaluate not only the above issue, taking into account the results that have been obtained or purchased for the needs of the public, but also to assess whether the supplier who has fulfilled this contract is socially responsible in its daily activities, and whether the funds received for the performance of the contract are used in accordance with the interests of the whole society, and not only concentrated on the maximum profit. Public spending through public procurement has a huge potential to positively influence the supply chain at all its stages, accordingly changing market trends in the field of socially responsible

contract performance, thus also positively influencing the quality of life of society as a whole. It is therefore particularly important that social responsibility is assessed as part of the tender evaluation process in public procurement.

A significant emphasis on the elements of social responsibility in public procurement is provided by the EU Public Procurement Directive, which includes a horizontal “social clause” on the principle that environmental and social obligations and labour rights applicable and derived from EU law, national law, collective agreements and international law must be respected.

Evaluating the provisions of the Directive, it can be concluded that the Directive directly includes an indication of the need to pay special attention to social aspects in the process of awarding contracts, while respecting the condition that there should be a link with the subject of the contract, prohibiting the use of criteria and conditions referring to general corporate policy, or also requirement for a specific corporate policy regarding social responsibility. However, the Directive does not clarify the meaning of these terms, i.e. what is understood by “corporate policy” or “social responsibility”.

The evolution of corporate social responsibility (CSR) approaches/principles up to the present day includes many different events and developed documents that form the basis of CSR principles as we understand them today. Evaluating the manifestation of CSR in public procurement, it is most directly reflected in Green Public Procurement. It should be noted that the aspects of social responsibility in procurement can be integrated not only as “impact on the environment”, but also other elements of social responsibility are taken into account within the framework of the procedure for awarding the right to conclude a public procurement contract, for example, the absence of tax debts, the average hourly rates of employees, such persons employment, included in a social risk group, etc.

According to the author, public procurement can be an excellent tool to promote social responsibility, as the public administration acts both as a market regulator and as a market participant. Social responsibility is characterised by the ability to plan for the long term, including planning and evaluating the impact of activities on society's standard of living in the long term, not just on today's government budget.

Assessing today's trends in public procurement, the author believes that public procurement in Latvia in terms of development is included in the first and second stages of the hierarchy of social responsibility, i.e. the bidders focus primarily on obtaining maximum profit when preparing the offer (stage 1), but the customer checks whether the bidder's offer meets all to the requirements specified in the regulatory enactments (stage 2), including the set standards, etc. Aspects such as ethics and the goal of improving society are not, in principle, prioritised, as an objective to be pursued, they are not put forward at all. According to the author's assessment, such an approach is fundamentally ineffective and characteristic of short-term thinking, which in the long run does not effectively implement the socio-economic and legal interests of the target group (society).

Summarising all of the above, the author has created a definition for the concept of quality in public procurement:

“Quality in public procurement is a set of features characterising the subject of procurement, which most effectively ensures the realisation of the socio-economic and legal interests of the target group (society) throughout the life cycle of the subject of procurement.”

When defining the quality requirements for the practical use of the proposed definition in the public procurement process, it is also important to identify exactly what the interests of the target group (society) are, which the customer can implement through public procurement. According to Article 10

of the State Administration Structure Law,⁵⁵ *state administration shall act in the public interest. Public interest shall include also proportionate observance of the rights and lawful interests of private individuals.* On the other hand, the purpose of the law “On Prevention of Conflict of Interest in Activities of Public Officials”,⁵⁶ according to its Article 2, is *to ensure that the actions of public officials are in the public interests.* To ensure good governance in the public sector, institutions and individuals must act in the public interest continuously, in accordance with the law, avoiding prioritising their own interests.⁵⁷

It can be concluded that the members of the Procurement Commission, who make the decision on the award of the contract in public procurement, are responsible as officials and act in the interests of the public, ensuring the implementation of the legal interests of the public. Given that public administration is basically financed from the state budget, which is made up of taxes paid by the public, it is in the interest of any member of society, as a tax payer that these funds are used efficiently. The receipt of public services provided by the state administration affects every member of society. Economic theory teaches how people use limited resources to meet maximally their needs. Accordingly, it is in the public interest to use the taxes collected as efficiently as possible. It follows directly from the above that social responsibility, within the framework of which the socio-economic and legal interests or needs of society are ensured, should be an essential evaluation component in the process of awarding a public contract, subject of course to the prohibition contained in the

⁵⁵ Law of the Republic of Latvia “Law of the State Administration System”. 21.06.2002. *Latvijas Vēstnesis*. 94.

⁵⁶ Law of the Republic of Latvia “On prevention of conflict of interest in the activities of public officials”. 09.05.2002. *Latvijas Vēstnesis*. 69 (2644).

⁵⁷ International Federation of Accountants, <http://www.ifac.org/system/files/publications/files/Good-Governance-in-the-Public-Sector.pdf>

Directive on requiring any specific corporate policies in the field of social responsibility.

According to the author, the question of how exactly the criterion of social responsibility should be related to the specific procurement subject is debatable. In practice and case law, the principle has been established that when applying the criteria for selecting the most economically advantageous offer, only those aspects that are directly related to the performance of the specific procurement subject should be evaluated. However, according to the author, such an approach covers the “needs of society” too narrowly. For example, in public supply procurement, where the supplier only ensures the assembling and delivery of goods produced by the manufacturer, there are often few resources involved in the supply chain to which elements of social responsibility could be applied. However, the revenues and profits from the performance of the contract are also used to ensure the economic activity of the supplier, including those that are not related to the performance of the specific subject of the contract. Thus, the company’s financial resources actually co-finance the economic activity of the supplier and it is in the public interest to use these funds as efficiently as possible, not only in relation to the part of the funds that make up the cost of the performance of the procurement item (i.e. in relation to those resources and elements of the supply chain that are directly involved in the performance of the specific contract), but also in relation to the total price. Therefore, the elements of social responsibility should be assessed not only in relation to the performance of the specific procurement subject, but also in relation to the applicant’s economic activity as a whole.

Quality dimensions and elements in civil contracts

The definition of the concept of quality proposed by the author includes the indication of “a characteristic set of features” “in the whole ... life cycle”, therefore, in order to be able to define specific criteria for evaluating quality in public procurement, it is necessary to identify the basic elements of quality that would be characteristic of the subject of public procurement.

D. A. Garvin (1984)⁵⁸ has identified 8 quality dimensions as a framework for thinking about the basic elements of product quality:

1. Performance;
2. Features;
3. Reliability;
4. Conformance;
5. Durability;
6. Serviceability;
7. Aesthetics;
8. Perceived Quality.

When analysing the legal aspects of “performance”, it is important to bear in mind Article 1812 of the Civil Law, which stipulates that the performance of obligations is valid only if it has been performed and received by the proper person, at the proper place, at the proper time and in due time.⁵⁹ And here there is a close connection with the regulatory framework of public procurement, where, in principle, a situation where the right to enter into a contract is transferred to a third party is not possible (except in case of a company reorganisation or transfer), so the performance of the contract must be ensured

⁵⁸ Garvin, D. A. 1984. What Does “Product Quality” Really Mean? *Magazine: Fall 1984*, October 15.

⁵⁹ Law of the Republic of Latvia “Civil Law”. 20.02.1937. *Latvijas Vēstnesis*. 41.

by the “proper person” at the “proper time”, which according to the public for procurement practices can only be extended in exceptional cases.

When assessing the nature of the performance in public procurement, the compliance of the performance with the concluded contract can be assessed primarily in terms of compliance with the functionality requirements specified in the technical specifications, as well as the performance conditions (time limits, etc.). In addition, even if it is not explicitly stated in the tender documents, compliance shall be evaluated according to the regulatory framework applicable in the country, including standards, regulations, etc. special legal norms that are binding for the specific procurement subject or the contracting parties.

Taking into account the above, in the author’s opinion, the basis for compliance and evaluation of quality as a “dimension of performance” is 1) the technical requirements of the subject of the procurement, defined in the technical specification, 2) valid legal norms binding on the executor as a subject of private or public law, incl., both special legal norms and general ones, e.g. Civil Law, etc.

Reliability is the third dimension of quality. In public procurement, “reliability” in this aspect is reflected in the life cycle of the procurement item and the resulting need for repair or maintenance frequency. In the author’s opinion, this quality dimension should be included more in the cost efficiency component, determining the best price-quality ratio, as this quality dimension has the most direct impact on the total costs of the product’s life cycle.

In author’s opinion, quality – compliance with requirements actually should not be treated as an isolated issue, as it is an integrated part of the quality dimension “performance”, i.e. the essential component of the quality of the performance, which characterises the compliance of the performance of the procurement object with the requirements specified in the legislation.

Drawing parallels with the procurement process and the evaluation criteria used in it, the use of durability as a measure of quality is, in principle, reflected in such an aspect as the warranty period, i.e. the period during which the cost of repairing the purchased item is covered by the supplier. And it is the warranty period offered that is often used as a criterion for evaluating bids. However, if the warranty period is not backed up by additional means of fulfilment of obligations, the offered warranty period, in particular if the offered warranty period is longer than the usual market practice, does not provide any cover, i.e. in the event of the occurrence of the warranty risk, the customer has no legal means of enforcing the fulfilment of obligations by the performer, especially if the performer does not have assets to cover these obligations. It can therefore be concluded that the use of the guarantee period as a tender evaluation criterion is not effective, if the fulfilment of the aforementioned obligations is not required to be reinforced, for example, by submitting a guarantee period guarantee in the form of a guarantee from a credit institution or insurance company.

On the other hand, the sixth dimension of quality is serviceability, or repair speed and competence. In public procurement, especially if the subject of the contract also includes the technical supervision of its use, the use of serviceability as a measure of quality is widespread, as a criterion for the evaluation of the bid, determining the reaction time within which the supplier can take certain actions required by the customer, for example, react in case of emergency, provide spare parts, etc.

Overall, the eight main quality objectives cover a wide range of concepts. Several dimensions include measurable product quality characteristics, others reflect individual preferences. The diversity of quality concepts helps to explain the differences between the five traditional approaches to quality. Each approach implicitly focuses on a different dimension of quality: the product-based

approach focuses on aesthetics and perceived quality; the manufacturing-based approach focuses on compliance and reliability. Taking into account the purpose of public procurement, it can be concluded that when evaluating the quality of the procurement item and determining the “best price-quality ratio”, the following quality dimensions should be evaluated:

1. Performance (technical and social quality).
2. Properties (functionality, efficiency, etc.).
3. Reliability (frequency of repair maintenance, warranty period and coverage).
4. Serviceability (reaction speed, distances, etc.).

Interaction of quality and price in civil contracts

A number of theories and arguments about the relationship between quality and price can be found in the academic and scientific literature. As in the manufacturing sector, the quality of the procurement item in the public administration sector must be emphasised through the prism of costs, i.e. the presence or absence of a quality of the cost in the operation of the product.

Public procurement is usually described as “the best value for money” (*the best price-value ratio*), but unfortunately, in most cases, only the lowest price is taken into account. Moreover, the recent economic crisis has increased the pressure to buy goods at the lowest possible price, which may have reduced the opportunities to focus more on “long-term and strategic thinking”. However, in line with the principles set out in the Directive, the customer is starting to evaluate the total life cycle costs of the product more actively. The customer, when awarding the right to conclude the contract, should take into account not only the life cycle costs of the product, but also essentially assess the fee for the quality that it chooses, in addition to all aspects of quality.

In practice, even after the introduction of the new Directive, the customers apply the determination of the most economically advantageous offer as an algorithm for the selection of offers, evaluating both the offer price and other costs (e.g. cycle costs) and several other criteria related to the performance of the contract (e.g. the deadline, warranty period, etc.), determining the overall result as a summary rating for all criteria together. However, if the principle of “the best price-quality ratio” defined in the Directive is taken into account, according to the author, the mentioned summary evaluation approach is inappropriate, because by definition it does not express “ratio”. In addition, by the calculation of each individual criterion, the offer of tenderer is evaluated in relation to the offer of another tenderer, i.e. relatively. In the author’s opinion, it is important to find out the nature of the concept of “relative value” and its relevance in obtaining the “best price-quality ratio”.

The term “relative value” is used in economics, business, mathematics, etc. The origin of the word *relative* dates back to around 1350–1400, in medieval English *relatif* (noun), in late Latin *relātīvus* (adj.) *relate*, -ive around 1480–1490.⁶⁰ Relative – one that is expressed, characterised in comparison with something else, in relation to something else.⁶¹

So, if the question were to be answered as to whether the variable importance determined in relation to other variable values of the same criterion (values of price or quality criteria for different applicants) should be used to determine the best ratio (highest rating), then according to the author, the answer would be negative, because a relative rating does not reflect the real ratio.

⁶⁰ Word Origin and History for *relative* -. *Dictionary.com Unabridged Based on the Random House Unabridged Dictionary*, © Random House, Inc. 2019. <https://www.dictionary.com/browse/relative>

⁶¹ Explanation of the word “relative”. <https://lv.oxforddictionaries.com/explanation/relativs>

Analysing the tender selection criteria set out in Directive 2014/24/EU, it can be concluded that the criteria, although defined, are very broad in terms of content and can be applied in different ways, depending on the procurement subject and the evaluation algorithm chosen by the customer. Although according to the public procurement regulatory framework, the choice of tender evaluation algorithm is the customer's prerogative, the author, after having studied the various possible ways of applying the criteria in the context of the substantive definition of the concepts contained in the Directive, concludes that the seemingly absolute freedom in determining the algorithm is actually not unlimited.

The author conducted research by modelling various scenarios and criteria application algorithms and concluded that the widespread evaluation algorithm, which determines the best bid by comparing it to the bids of other tenderers, is inherently inadequate, as it is thus impossible to determine the best price-quality ratio. Thus, the candidate's position in the evaluation is determined by comparison of bids, not by the best price-quality ratio, for which the customer could achieve his goal.

Such a paradox arises because when comparing bids relative to each other, if the variables change, the result also changes, i.e. if one of the bidders withdraws from the evaluation or is excluded, it also changes the overall evaluation of the bids of the other bidders, which by nature could not be the case, given that the best price-quality ratio of the offer must be determined. This means that the evaluation of each offer should be independent of the existence and/or content of other offers.

However, if the price ranking is made relative to the reference price (or two reference prices, higher and lower) determined by the customer, the ranking will no longer depend on unrelated alternatives and strategic manipulation will

no longer be possible.⁶² Taking into account that before the procurement announcement, market research should be carried out, determining the expected contract price, which should also be indicated in the buyer's profile, according to the author, the expected contract price could be used as a comparative price. However, in this case, it should be assessed whether the algorithm will be applicable even if the offered contract price exceeds the expected/comparable price. The author found, by making calculations, that such an operation is mathematically possible. In addition, in the case of an applicant of such an algorithm, whose offered contract price exceeds the contract price expected by the customer, the overall rating would decrease, because the price criterion rating would have a minus sign. In effect, no points would be awarded for the price criterion or any other positive assessment that would improve the applicant's overall score. It also removes any relativity in the determination of the best offer is excluded in this way, i.e. the evaluation obtained by each individual applicant no longer depends on the evaluations of other applicants. A similar approach should also be used when evaluating quality criteria, thus comparing the bids of applicants with each other, but first, each bid should be evaluated independently, taking into account the maximum values of the specified quality criteria defined by the customer.

The author finds that effective competition in public procurement is not always possible, especially in areas where there is a limited range of suppliers on the market. Accordingly, the objective mentioned in the Directive of determining the most economically advantageous offer by comparing the relative values under conditions of effective competition would often not be achieved, especially in cases where due to the absence of effective competition, only a couple

⁶² Lundberg, S., Bergman, M. May 4, 2011. *Tender Evaluation and Award Methodologies in Public Procurement*. <https://ssrn.com/abstract=1831143> or <http://dx.doi.org/10.2139/ssrn.1831143>

of relative values are comparable, which under monopoly conditions may not be close to being economically beneficial to the customer. Thus, when evaluating the offer of the sole supplier, there are no other relative values to compare with and it can be found that the offer received the highest evaluation. However, if the offer were compared with the target values set by the customer, it would be possible to find completely different results, where in the case of a particularly low evaluation, the customer would have to consider whether the right to conclude the contract should be awarded at all.

It should be noted that neither the Public Procurement Law, nor the Law on the Procurements of Public Service Providers, nor any other legal norms regulating public procurement contain any reference to the best price-quality ratio as a method of evaluating the selection of primary offers, determining the most economically advantageous offer. In the author's opinion, the absence of such a concept in the national legislation also results in the fact that in practice the customers do not try to determine such a ratio but use the usual methods of determining the most economically advantageous offer.

Analysis of the explanation contained in the Directive shows that it repeatedly emphasises that a relative value comparison or comparative assessment should be carried out in determining the best price-quality ratio. The Directive does not indicate how this evaluation should be carried out, whether in relation to the offers of other applicants, or in relation to the optimum needs defined by the client, or in relation to estimates of the maximum benefit or performance that the client wishes to obtain, taking into account its financial capabilities (or the expected contract price). According to the author's opinion, the Directive should specify that for determining the best price-quality ratio, the comparative evaluation should be carried out in relation to the values defined by the customer – the threshold values of the evaluation criteria.

Accordingly, in order to define certain threshold values, certain evaluation criteria should be defined, to be taken into account when determining the best price-quality ratio. Just as the concept of quality varies in the works of different authors throughout history, the concept of quality can also vary in the cross-section of different industries. Accordingly, in order to be able to define quality criteria and their evaluation in the public procurement of construction works, it is necessary to study the content framework of the concept of quality specifically in the construction industry, taking into account not only the definitions and explanations included in the regulatory framework, but also the historical origin and nature of the concept, which characterises the need and importance of quality in construction, not only in terms of efficient use of funds, but also to meet public safety and other needs.

1.2.3 Concept of quality in construction: practical and legal aspects

A problem with the construction industry, both historically and today, is that the definition of quality in any given project can be fickle. “Normal and usual” is a term usually incorporated into the contract language in relation to the expected construction skills of the contractor. This means that the quality of performance will vary depending on many factors. As a result, it is clear that efforts should be made to specifically define all aspects of the building regulations in the contract before the actual construction process begins. Otherwise, after the conclusion of the project, subjective evaluations will prevail.⁶³

⁶³ Prichard, R. 2009. *Getting a Grip on Quality in the Constructed Project: Defining Quality*. *Construction Quality*. October. <https://www.irmi.com/articles/expert-commentary/getting-a-grip-on-quality-in-the-constructed-project-defining-quality>

Since the terms that define the quality of construction work are abstract and widely interpreted from different points of view, it is difficult to establish the exact meaning of these terms in order to achieve satisfactory results. After the work has been completed, when the client can actually assess and measure the quality of the construction, it can become even more of a challenge.

What one party perceives as “normal and ordinary” depends on many factors that threaten the project even before it begins. This task becomes impossible when the parties decide that a common understanding has not been reached. This subjectivity can then be formulated in favour of the contractor’s delivery system, but only in case of incredible success or if the contractor is able to significantly exceed the expectations (desires) of his client. Since none of these methods can be predicted with a high degree of certainty to achieve the desired result, a more rational approach is required. When the standards that define quality are left undefined, poorly defined, or ambiguous, it is impossible to maintain compliance with them either during the work process or after its completion.⁶⁴

The aim of this chapter is to provide some guidance on how to incorporate broader quality-related considerations into the definition of quality standards to be integrated into draft civil contracts already during the public procurement stage. This is because subsequent changes to such aspects are not possible due to legal restrictions (changes to the technical specifications or the draft contract are not allowed after the announcement of the procurement results, unless such a possibility was explicitly provided for from the outset).

⁶⁴ Prichard, R. 2009. *Getting a Grip on Quality in the Constructed Project: Defining Quality*. *Construction Quality*. October. <https://www.irmi.com/articles/expert-commentary/getting-a-grip-on-quality-in-the-constructed-project-defining-quality>

Although the definition of quality is defined for each project, for the construction industry as a whole and when comparing projects with each other, the understanding of quality is very fluid. On the one hand, it can be treated as a requirement to observe reasonable caution in activities where a person/entrepreneur could more or less predictably cause harm to someone else, for example, a building could collapse as a result of poor quality construction work, causing damage to the person's health, life or property. On the other hand, as people's standards of living rise, so do their expectations of the environment in which they live. And in addition to safety aspects, there is also a growing desire for other aspects of quality, such as aesthetic, financial, etc.

In construction, the quality of the service and the product are not evaluated separately. In construction, quality compliance with standards is assessed for both services and products together. Although the end result of construction is an object (building) intended to be used for the customer's needs, the construction process of this object (service) is also important. It is not only the quality of the result that is important, but also the quality of the process. An example of this is green public procurement and contract criteria, where aspects directly related to construction process activities are often used and evaluated.

When defining quality requirements, it is primarily necessary to comply with the requirements and restrictions of the national regulatory framework, including also quality requirements through the prism of building regulations, i.e. the customer must first define his quality expectations in the sense that it is determined by the regulations governing the field of construction.

The author concludes that the mechanism for monitoring the quality of work performance is sufficient, including work at all stages of construction – from the design of the construction to the commissioning of the work, as well as afterwards, during the operation of the building. Thus, the presence or absence of the quality element should be evaluated separately for each stage, since

the supervision of each of the stages mentioned is in a regulated sphere, where the competence and supervisory activity are limited to the powers, rights and obligations established by law. Similarly, when assessing the responsibility of persons for the performance of poor quality work, the powers, rights and obligations in each of the regulated areas should also be taken into account.

The responsibility for low-quality construction rests on the control stage where, contrary to the fact, the works performed are recognised as being of high quality, or where low-quality works are allowed to be carried out. However, in each case, responsibility must be assessed separately. In addition, it should be explained whether, in each specific case, it would be justified to speak about a person's lack of competence, negligence or intentional action (inaction) that resulted in a low-quality performance? And can these aspects influence the scope of liability if the causes and extent of damages are evaluated? Can the elements of responsibility be diversified in the case of a public construction contract and a simple private contract? In general, what are the legal instruments for the customer to influence the quality of the performance of a contract with a long life cycle?

In order to reveal this, in Chapter 4, the author evaluates and compares the legal regulation of the implementation of quality elements in public procurement and public-private partnership contracts. On the other hand, in Chapter 5, the author studies the legal aspects of compensation for damages in the event of the performance of a low-quality contract for the procurement of construction works.

1.2.4 Quality aspect within traditional public procurement and PPP contract performance

As part of the research, the author analyses the suitability of the Quadruple Helix Concept for the implementation of public-private partnership in the implementation of socially significant projects, determining the quality dimensions that are essential for a specific project, as well as evaluating the legal aspects of their evaluation and implementation. As it was established earlier, it is not possible to define a universally applicable algorithm of quality evaluation criteria, because its components depend on the specific object, place, society for whose needs it is implemented, etc. variable factors. Therefore, the research will analyse the practical and legal aspects of the implementation of the public-private partnership model based on the Quadruple Helix Concept (hereinafter – QHC).

Despite increased attention to the interaction between society and the public sector in the framework of public procurement, little is known about diversified forms of public-private partnership cooperation, and research and development of new legal and practical forms of cooperation are needed. With this new QHC-based PPP model, decision-making would move towards a shared system, shifting decision-making power from policymakers, who traditionally have the primary decision-making role, to the public through proactive engagement. Such a strategy can help improve the process of sustainable development by defining clear responsibilities and creating opportunities for a more efficient flow of resources. Formulating such a legal and practical framework for a QHC-based PPP cooperation system would help public authorities to better realise the changing needs of society in the most efficient way.

On the other hand, looking through the prism of the purpose of public procurement – to always strive for the most effective result that can be achieved using public resources – it is critically important to ensure the effectiveness

of this result not only in the short term, but also in the long term, ensuring durability and compliance with the conditions of the specific environment, so analogues –as quality dimensions – are the variables that change along with society and surrounding environment. The assessment of efficiency and the necessary changes must also be determined dynamically, and decisions must be based on science, that is to say, weighed, tested and maximally certain, integrating into the operation such well-known approaches as circular economy, zero waste, circular business models (CBM), resource sharing, corporate social responsibility (CSR), etc., which have been recognised in world studies as a prerequisite for the efficiency of public administration.

The circular economy is one of the current perspectives that can offer innovative and radical solutions to address outstanding issues related to sustainable development. The circular economy is already practiced in collaborative models with public involvement, such as deposit refund systems, the sharing economy, etc. Conceptually, there should be a shift from a single organisation to inter-institutional collaborative systems involving various stakeholders, all of whom together create value through engagement and interaction.

Summarising various theoretical findings, the author concludes that in order to ensure quality elements in all its dimensions and throughout the life cycle of the procurement object, it is necessary to be able to define them dynamically, i.e. according to the current needs and interests of society, and decisions must be based not only on legal science, but also on economic science. Accordingly, it would be necessary to evaluate how the customer, in interaction with the end user, can identify and maintain these quality requirements, ensuring integrity in an interdisciplinary manner.

Interdisciplinary collaboration to identify and maintain quality requirements

Previously, the author has already analysed and explained the substantive framework of the concept of quality, using a multidisciplinary approach⁶⁵. By analogy, this multidisciplinary approach is important when developing PPP contract conditions and contract award evaluation criteria, i.e. all dimensions of quality should be taken into account, not only from a legal and economic perspective, but also focusing on areas important to the end user, i.e. the needs of society. Thus, already in the planning phase, the participation of the public is necessary in order to be able to determine and include in the contract the quality requirements that are essential for the public. Undeniably, a practical question arises as to how justified and effective such public involvement in the state administration would be and whether the goal justifies the means. The answer to this question would be very simple, taking into account that the procurement documentation is usually developed and approved by the procurement commission, which usually consists of an average of 5 commission members. And this question should be answered with a counter question: Are five people capable of defining the needs of society? The need for public involvement is also justified by the need to ensure sustainability by evaluating the quality of public contract performance in all quality dimensions, including significantly more aspects that have so far been defined in the Public Procurement Directive and applied in public procurement practice. For long-term contracts (longer than 5–10 years) it is essential to ensure legal flexibility for updating and implementing the (changing) needs of society. However, when implementing such PPP contracts through public procurement, it is not possible to define the

⁶⁵ Velve, L. 2016. Aspects of a multidisciplinary approach to understanding the concept of quality in public procurement. Part II of the International Scientific Conference “*Social Sciences for Regional Development 2016*”: *CURRENT PROBLEMS OF STATE AND LAW*. (ISSN 2255-8853). 236-245.

future needs of all society at the time of awarding the contract. Accordingly, there must be a legal solution as to how the needs of society can be integrated throughout the period of performance of the PPP contract, i.e. the society should in fact be one of the participants of the PPP.

However, it should be taken into account that the activity of the state administration is strictly regulated, with limited opportunities for experimentation, design thinking and co-creation. A transformation and reinterpretation of the legal base is needed to develop innovative governance models, implementing effective, community-driven management and sharing of public resources, not focusing on the cost factor, but on other forms of shared value, e.g. public benefits or environmental impact, including those not directly related to the performance of the specific procurement contract. It should be taken into account that the revenue from the performance of the public procurement contract includes not only direct costs, but also profit, which will also be used for other needs of the company's economic activity.

According to the author's assessment, identifying the cooperation of interested persons already in the early stage of procurement planning by starting interdisciplinary cooperation between the public and private sectors can significantly positively influence the choice and application of quality criteria in the selection stage of suppliers/contractors. For example, the integration of issues of construction by-products and waste management into the quality assessment matrix could be one of the more effective ways to improve the sustainability indicators of qualitative benefits, as this quality criterion not only provides minimum measures to reduce environmental impacts through reducing the amount of waste by reusing it in construction, and other forms of environmental impact reduction already well known in the field of public procurement, but in principle it is possible to create a multi-stakeholder cooperation mechanism specifically for the implementation and operation of a particular construction

project, placing the responsibility not only on the contractor, but also on the customer, forming institutional partnerships, etc. In such cases, of course, it is important to comply with the requirements and restrictions of regulatory acts for public persons to engage in economic activities. Evaluating the legal and practical aspects in this matter, the author can conclude that legal restrictions on the client to form institutional partnerships with the private sector for the implementation of certain activities are permissible, as long as they comply with the requirements for the use of public property, the regulation of public procurement and the fact that within such activities, the public person does not engage in commercial activities without proper justification.

Although some research focuses on multi-party collaboration⁶⁶, the novelty of QHC and multi-party collaboration means that there is still a limited amount of research on collaborative procurement systems that considers more than just the supplier and the customer. The research examines the cooperation approaches of triple⁶⁷ *helix*, *quadruple helix*, and *quintuple helix*.

The Triple Helix model focuses on the cooperation between the scientific institution, the supplier and the customer. The Quadruple Helix (QHC) incorporates the Triple Helix by adding “civil society” as a fourth element. On the other hand, the Quintuple Helix model is broader and more comprehensive, contextualising the quadruple helix and additionally adding an “environmental” element. While the Triple Helix collaborative model emphasises knowledge creation and innovation in the economy to be compatible with the knowledge economy, the quadruple helix already promotes a societal and democratic

⁶⁶ Witjes, S., Lozano, R. 2016. Towards a More Circular Economy: Proposing a Framework Linking Sustainable Public Procurement and Sustainable Business Models. 112. *Resources*. 37. <https://doi.org/10.1016/j.resconrec.2016.04.015>

⁶⁷ Thomson, J., Jackson, T. 2007. Sustainable Procurement in Practice: Lessons from Local Government. 50. *Journal of Environmental Planning and Management*.421. <https://doi.org/10.1080/09640560701261695>

perspective on knowledge creation and innovation. In terms of the Quadruple Helix, the sustainable development of the economy requires co-evolution with society. On the other hand, the Quintuple Helix emphasises the necessary socio-ecological approach in society and economy. Within the framework of the Quintuple Helix innovation model, the natural environment of society and the economy must also be seen as drivers of knowledge promotion and innovation, thus determining the possibilities of the knowledge economy.⁶⁸

Taking into account the fact that public procurement is bound by a certain normative regulation, the author of the study finds out what are the possibilities of creating such multi-party cooperation models based on the Triple, Quadruple and Quintuple Helix concept within the framework of public procurement. The author, evaluating the ability of the modern public sector to implement sustainable public procurement in all its quality dimensions, comes to the conclusion that without interdisciplinary cooperation with specialists in the field of procurement at a scientific level, it is impossible to define an algorithm of quality criteria in such a way that the best price-quality ratio can be assessed not only at the moment of delivery, but also in the long-term perspective. This is especially true for procurement items with a long life cycle, i.e. 10 years and more, which is also typical for construction contracts. A critical factor to consider when developing a quality assessment algorithm is to be able to define the elements of quality in all its dimensions for the future society. In fact, the creation of such an algorithm requires modelling, developing assumptions and long-term forecasts, not only regarding the material and technical aspects, but also for the socio-economic and geopolitical aspects, for the development of which the customers simply do not have such professional capacity, accordingly,

⁶⁸ Carayannis, E. G., Barth., T. D., Campbell, D. F. 2012. The Quintuple Helix innovation model: global warming as a challenge and driver for innovation. *Innov Entrep.* 1, 2. <https://doi.org/10.1186/2192-5372-1-2>

the attraction of scientific competence would not only be desirable, but even critically important.

In the author's opinion, the creation of such cooperation models between the supplier and the customer is a certain challenge in the modern public administration sector, because it actually foresees the diversification of the customer's role – in order to move from simply economically justified use of public resources to higher profitability indicators, the customer basically has to think like an investor, and not only like an administrator of public funds. Accordingly, interdisciplinary cooperation is an essential prerequisite, since the public sector does not have an "*investor approach*" to the use of funds. The investor's approach to the use of funds is focused on researching demand, forecasting demand, analysing market participants, analysing resource availability and the supply chain, evaluating socio-economic and geopolitical forecasts, etc., indicators that are the basis for decision-making, while the focus of the public administration sector is basically on a certain providing functions at the lowest possible cost. And such an approach should already be in place at the procurement planning stage, i.e. before a decision is made on the use of certain funds for a specific supply or before investments are made.

The author, evaluating the potential of the Quintuple Helix approach in the field of public procurement, evaluating it as a possible variant of the modification of the public-private partnership, concludes that a Quintuple helix-based PPP is essentially impossible, because the public-private partnership is actually a civil law contract concluded as a result of an administrative process, which includes the rights and obligations of the specific contracting parties. In the case of QHC, 4 cooperation parties can be identified – scientific institution, public institution (customer), supplier (commercial sector) and society (natural person as an individual or NGO representing public interests). On the other hand, the fifth element "Environment" included in the Quintuple helix cannot exist in

any legal form as a partner of the partnership, because it does not have the legal capacity or capacity to act as a legal entity or a natural person. Thus, in the public-private partnership model, the Quintuple Helix approach can exist only conceptually, defining the priorities and achievable goals of the cooperation participants.

Legal instruments and methods of implementing changes to a civil contract in traditional public procurement and within PPP

In practice, different types of influence on the performance of a civil contract are used, depending on whether the traditional public procurement or the PPP procedure is applied.

When applying traditional public procurement, it is actually possible to identify several ways in which the customer can change, specify, supplement or in any other way adjust the contract performance requirements:

- Amendments to the contract in accordance with a predetermined procedure
- The right of the customer to initiate changes is defined in the contract
- The customer's rights arising from the law make changes if they are economically and legally justified

Regarding the possibility of contract amendments, a number of restrictions in the regulatory framework of public procurement must be taken into account. If the Civil Law stipulates the right of the parties to freely agree on the terms of contract performance, including to make amendments and changes freely upon the agreement of the parties, then the normative regulation of public procurement determines specific cases, volumes and conditions under which any amendments are generally permissible.

Evaluating the requirements of the Public Procurement Law, Directive 2014/24/EU and other binding regulatory acts regarding the amendment of a public procurement contract, the author can conclude that within the framework of the aforementioned regulations, the customer does not have any legal instruments to influence the performance of a contract concluded as a result of public procurement, whereas the admissibility of amendments basically results only from such circumstances that the customer could not foresee in advance. The permissibility of amendments would not be based solely on the fact that the customer, like an investor, has analysed the market, made forecasts of changes, evaluated trends and, in order to maintain profitability, it is necessary to make appropriate improvements or adjustments.

The foregoing may also be concluded with respect to the customer's right to make changes, if such a right is reserved in the contract, because again the same normative regulation regarding the making of amendments is binding. The right of the customer to make changes arising from the law, if they are economically and legally justified, follows from other special legal norms, for example, if *force majeure conditions* have been established, a state of emergency has been declared in the country and other circumstances that do not depend only on the customer. However, making such changes is basically permissible only in certain cases and to a certain extent. Thus, the author can conclude that it is not legally possible to influence of the performance of the contract concluded as a result of traditional public procurement with the aim of improving the result and benefit for society as a result of the performance of the contract.

Therefore, when planning the implementation of long-term projects with a long life cycle and multifactorial impact on economic efficiency and the realisation of public interests, the PPP procedure is suitable. However, after evaluating the classic PPP variations and risk redistribution mechanisms, the author comes to the conclusion that the client's options and rights to modify the

terms of the contract, if such a need arises from the development trends of the economic situation and other factors, are still legally limited, because it is actually impossible to forecast for such a long period of time what the life cycle of the object of procurement will be, i.e. the needs of the future society can only be defined by the society itself in the relevant period of time. Thus, a PPP based on QHC modification is justified and essential for the long-term provision of public needs.

In practice, there are various ways to involve the public as a participant in the implementation of the PPP project, but so far this participation has been more formal, for example, by conducting a public consultation or seeking the opinion of public in the planning phase of the project. However, it does not include the identification of future needs and implementation options. Thus, the involvement of society, as a real PPP participant, should not be formal, but real. It is possible to involve the public in a PPP based on the QHC approach in several ways. The simplest of these is the involvement of an organisation representing public interests in an institutional partnership, for example, if an organisation representing specific interests joins as one of the participants in the PPP contract. There are no legal obstacles to such involvement, however, such an organisation actually represents the interests of a certain group of society, as only the most civically active part of society is usually involved as members in such organisations. An individual who is not a member of such a society has limited opportunities to get participate. Of course, participation can be ensured if the individual is admitted to the relevant NGO as a member. However, how legally justified is such a condition to become a member of a legal entity, so that a representative of society can participate in the realisation of his interests? By way of analogy, when assessing the possibilities for the realisation of the individual's legal interests in the field of general human rights, the first part of Article 11 of the Convention for the Protection of Human Rights and

Fundamental Freedoms states that everyone has the right to freedom of peaceful assembly and to freedom of association with others, including the right to form and join trade unions for the protection of his interests. Thus, the right of a person to participate in organisations representing his interests in order to defend his interests is determined by the aforementioned Convention. According to the author, such an individual's initiative and the need for active participation cannot be considered disproportionate or otherwise restrictive, since a person can withdraw from the membership of the association at any time, simply by submitting a request to that effect, and membership of an NGO as a member does not create any legal consequences or obligations. Accordingly, no obstacles can be identified that would prevent any member of society from realising their interests by joining the NGO as a member and thus gaining the opportunity to actively participate in decision-making.

Evaluating the possibilities for an individual member of society to participate individually in a PPP institutional partnership, it can be concluded that, although it is legally possible, in practice it would create a significant burden even if several people wished to do so, because it would mean that these people would also become legal participants of the institutional partnership with all the legal consequences and obligations that this entails. For example, if a new legal entity is founded as a result of an institutional partnership, such an individual is mistaken for the founder of the legal entity, and if there are several tens or hundreds of such individuals, rational and effective planning of economic activity and decision-making is not possible. Therefore, the involvement of an individual as a member of an institutional partnership is not suitable for QHC PPP implementation.

There is also an opportunity for an individual to get involved in financing the activities of a legal entity established as a result of such an institutional partnership for the implementation of a specific goal with a crowd funding tool.

Crowdfunding is an increasingly popular and widespread form of online fundraising where anyone can make small individual contributions and pool resources to fund a specific project to achieve a specific goal.

Research shows that many crowdfunding projects are successful in raising funds, even if their expected returns are very low or even negative. This means that the compensation structure of many crowdfunding projects closely resembles charitable donations; people make voluntary contributions to public goods through crowdfunding platforms.

The author concludes that attracting the crowdfunding for implementation of a public-private partnership agreement is possible and, in some cases, even desirable, as this not only attracts additional funding for the implementation of the project, but also the implementation of the project takes place in accordance with the priorities set by the society by “voting” with its own financial resources. However, since the crowdfunding is in principle possible only at the start of the project, as the public will not wish to finance the implementation of some state functions in the long term, financing not only the implementation but also the operation phase, the involvement of the public through NGOs is essential so that its interests are taken into account throughout the life cycle of the procurement object and it would also be possible to introduce innovations based on the needs of the society throughout the contract performance period.

Practical and legal limitations and opportunities for intersectoral institutional resource sharing within PPP

In the private sector, entrepreneurs have already understood and appreciated the benefits of sustainable business, while in the public sector, sustainability is basically limited to sustainable public procurement. However, analysing the compliance of procurement contracts with all necessary quality dimensions in the long term, the author has concluded that, in principle, they cannot be ensured without the involvement of the end user in the entire

procurement life cycle. In addition, quality is significantly affected by the availability of both financial and intellectual resources. In order to move from simply economically justified use of public resources to higher profitability indicators, the administration must basically think like an investor, not just a manager of public resources. Accordingly, interdisciplinary cooperation is an essential prerequisite, since the public sector does not have an “investor approach” in the use of resources. The investor’s approach to the use of resources is focused on demand research, forecasting, market analysis, resource availability and supply chain analysis, evaluation of socio-economic and geopolitical forecasts, and other indicators that are the basis of decision-making, while the focus of the public administration sector is mainly on providing certain functions as possible lower costs. Resource sharing is an effective way to increase sustainability and also profitability as it reduces costs for each party involved. However, the practical and legal aspects of the sharing of intersectoral institutional resources within the framework of public-private-human-science partnership in order to ensure the efficiency and quality of public administration have not been analysed anywhere. It is important to evaluate the aforementioned, because such four-party cooperation may have certain limitations, depending on the legal form of their mutual legal relations, especially with regard to sharing the resources of a public person both with another public person and with the other parties involved in the partnership.

In order to be able to perform a conceptual analysis of the public-private-human-science partnership in the context of resource sharing, it is essential to define what is generally understood by the term “resource sharing”. Resource sharing can also be defined as cooperation to a certain extent, and it has received more and more attention in recent years.

When evaluating the legal restrictions of sharing resources for a public person, the following aspects related to the type of resources to be shared and the resulting and binding legal relations should be evaluated:

1. Resource Type:
 - Human resources;
 - Financial resources;
 - Property (immovable);
 - Property (moveable).
 - Intellectual resources, or knowledge
2. Functions of a public person:
 - Statutory functions;
 - Functions aimed at the needs of society;
 - Voluntary functions for increasing operational efficiency, building an image, shaping public opinion, improving the quality of life and environment, etc.

Resource sharing in the public sector would be a new approach that is not practiced in principle, mainly due to the functional focus. As the author previously stated, in the private sector planning is characterised by an investor's approach, i.e. decision-making is based on specific commercially justified considerations, so that the result not only achieves a positive result but is also profitable. Thus, often for the purpose of optimizing resources, competitors also become cooperation partners, assigning a secondary role to the ownership of resources, but focusing on making a profit, that is, on the result.

Analysing the aforementioned theoretical findings in connection with the operation of the public administration and the decision-making motivation of the employees involved in it, a similar trend can be seen, as each institution focuses on achieving its goals, its budget, its results. However, taking into account that the general goal of the state administration is one, that is, the protection and

provision of public interests, neither property rights nor other aspects of psychological belonging should be obstacles in order to ensure the said needs as efficiently as possible by combining all available resources. The above also follows from Paragraph four of Article 10 of the State Administration Structure Law, which stipulates that in implementing the functions of State administration, the State administration, individual institutions or officials, shall not have their own interests.⁶⁹ Thus, inter-institutional sharing of resources is one of the most important prerequisites for a cooperative and efficient public administration, as it allows for efficient use of resources to maximise benefits for society.

Resource sharing can take place between different public institutions, such as state administration institutions, municipalities, as well as non-governmental organisations. This would allow pooling of resources, reducing costs as resources can be used more efficiently. It can also help improve service quality as resources can be used more efficiently. In addition, resource sharing can also help promote cooperation between different government institutions, together providing better outcomes for society. Resource sharing can also help reduce bureaucracy and improve efficiency, and by sharing resources, public authorities can avoid duplication of functions and also promote efficient circulation of resources, also implementing circular economy principles.

Analysing the regulatory framework for the use of resources in the public sector, it can be established that certain legal restrictions for such a concept of sharing resources in the public sector still exist. For example, according to Article 3 of the Law on Prevention of Squandering of the Financial Resources and Property of a Public Person, a public person, and also a capital company shall administer the financial resources and property rationally, that is:

⁶⁹ Law of the Republic of Latvia “Law of the State Administration System”. 21.06.2002. *Latvijas Vēstnesis*. 94

- 1) actions shall be such as to achieve the objective with the minimum utilisation of financial resources and property;
- 2) property shall be alienated and transferred to the ownership or use of another person at the highest price possible;
- 3) the ownership or use of property shall be acquired for the most profitable price.⁷⁰

Thus, the condition that the property can be expropriated and transferred to another person for ownership or use at the highest possible price, essentially limits the sharing of resources as such, because resource sharing basically means sharing the property (giving it for use) without compensation.

The author concludes that there can be at least two challenges of a legal nature when implementing inter-institutional cooperation, within the framework of which the property of a public person is transferred (invested in implementation):

- 1) If a public entity is a participant in such inter-institutional cooperation, i.e. for example, as a result of the PPP procedure, an institutional partnership is established – a new organisation is founded, which is a legal entity under private law, but as a result of the project, it is not intended to delegate the performance of state administration tasks to it, or to implement the provision of services of the relevant public entity;

⁷⁰ Law of the Republic of Latvia “The Law on Prevention of Squandering of the Financial Resources and Property of a Public person” 02.08.1995. *Latvijas Vēstnesis*. 114.

- 2) NGOs involved in institutional partnership do not have the status of public benefit organisation according to the Law on Public Benefit Organisations⁷¹ or the merchant does not have the status of a social enterprise according to the Law on Social Enterprises⁷².

The author concludes that it is not possible to share the resources of a public entity within the framework of an institutional partnership implemented as a result of the PPP procedure, if as a result of such a partnership:

- It is not planned to delegate the direct functions of the public person or to provide the services of the relevant public person in accordance with their statutes or regulations;
- A legal entity under private law is established within the framework of an institutional partnership, which is not a limited liability company, and therefore cannot acquire the status of a social enterprise;
- As a result of the PPP procedure, the public and private partner jointly establish a new capital company with the aim of ensuring the operative operation and maintenance of the result of the implemented project, which is not actually possible by limiting the profit obtained as a result of economic activity to the founders of the company (restriction of the second part of Article 5 of the Social Enterprise Law⁷³ regarding profit distribution), because the absence of profit in an investment project, where the private partner of the

⁷¹ Law of the Republic of Latvia “Law on Public Benefit Organizations”. 07.07.2004. *Latvijas Vēstnesis*.106.

⁷² Law of the Republic of Latvia “Social Enterprise Law”. 25.10.2017. *Latvijas Vēstnesis*. 212.

⁷³ Law of the Republic of Latvia “Social Enterprise Law”. 25.10.2017. *Latvijas Vēstnesis*. 212.

PPP must provide project financing (actually lending), is a critical factor for the implementation of public-private partnership

- An NGO is established within the institutional partnership, which does not have the status of a public benefit organisation in accordance with the Law on Public Benefit Organisations⁷⁴.

of the Law on State Administration⁷⁵ also stipulates that a derived public person, when establishing private law legal entities, cannot avoid the responsibility stipulated in the said law and set other goals for them that do not derive from the functions of the relevant public person. Therefore, the public person's opportunities to engage in projects and activities that are not directly related to the relevant person's functions are limited.

The law also stipulates that if it is intended to transfer the immovable or movable property of a public person for free use for a period longer than five years, the Cabinet of Ministers or a body of a derived public person shall make a decision on this, respectively, unless the law or the regulations of the Cabinet of Ministers provide otherwise. The decision on the transfer of the property of a public person for free use to a public benefit organisation or a social enterprise is taken by the Cabinet of Ministers or a body of a derived public person, respectively. The property of a public person shall be transferred to a public benefit organisation or social enterprise for free use for as long as the relevant status is in force, but not longer than 10 years. The property of a public person can be re-transferred to a public benefit organisation or a social enterprise for free use.⁷⁶ Thus, it can be established that the law in principle limits the property

⁷⁴ Law of the Republic of Latvia "Law on Public Benefit Organizations". 07.07.2004. *Latvijas Vēstnesis*.106.

⁷⁵ Law of the Republic of Latvia "Law of the State Administration System". 21.06.2002. *Latvijas Vēstnesis*. 94.

⁷⁶ Law of the Republic of Latvia "The Law on Prevention of Squandering of the Financial Resources and Property of a Public person" 02.08.1995. *Latvijas Vēstnesis*. 114.

of a public person transferred for use free of charge to a public benefit organisation or social enterprise established within the framework of PPP institutional partnership, because the effectiveness of PPP implementation can often be ensured only with a longer implementation period.

In order to evaluate the applicability of the above-mentioned legal restrictions to a specific case, a case study modelled for the implementation of the pilot project was carried out, where it is planned to implement a project in the territory under the control of the Free Port of Riga Authority, the main functional activity of which is focused on public safety and civil protection, so it is not primarily related to the functions of the Free Port of Riga Authority. The specific territory belongs to the Ministry of Transport of the Republic of Latvia, whose functions do not directly include issues of public safety and civil protection. Within the framework of the project, it is planned to build the basic infrastructure and technical base in a degraded area in order to create a Security and Crisis Management Science Center – a multi-functional, innovative, interdisciplinary training centre / training ground for physical and psycho-emotional training in non-standard/emergency conditions for security, civil protection, security, etc. personnel/students, as well as public education in emergency situations.

Accordingly, within the framework of the study, the legal restrictions on the use of the territory and the creation of a public-private partnership based on the QHC concept for the implementation of the pilot project were evaluated, and it was found that the most effective implementation of the pilot project would be possible by establishing an institutional partnership and following the concept of resource sharing, i.e. each of the partners can transfer to an organisation founded

as a result of the partnership material and technical resources available/important for the project, without compensation, but the following problem aspects have been identified:

- 1) Building rights and ownership rights after the expiry of the building rights;
- 2) The rights and opportunities of a public person to engage in a project that is not directly related to its functions;
- 3) Free use of material and technical bases owned/controlled by a public person is permitted for another public person.

Regarding the (un)authorised gratuitous use of a material and technical base owned/possessed by a public person to another public person, it should be noted that although there is no restriction in the law to transfer the property of a public person to another public person, because the law stipulates that it is prohibited to transfer it for free use to a private person or a capital company, in practice, the transfer of such resources, as well as sharing, is limited by the budget planning policy of the public administration and the principle that the institution uses its approved budget only for the implementation of its institution's functions.

The transfer of public property for free use should not be limited if it is necessary for the implementation of projects of national importance, since their importance in itself justifies the implementation of important public interests. In the event that the purpose of transferring the property of a public person (including land) for free use is not directly related to the functions defined in the relevant public person's statutes and other regulations, it is basically impossible to apply the mentioned exceptions, because a public person cannot refer to the transfer of its functions or delegation.

The author concludes that there are significant practical and legal restrictions for a public person to be able to freely pursue any interests important to the society, if the realisation of these interests does not directly correspond to the functions of the public person, even though this public person has free resources with the help of which these interests could be pursued in the highest quality and in an efficient manner. In principle, the formal separation of public administration functions prevails over the purpose for which public administration is necessary at all.

1.2.5 Legal aspects of compensation for damages in event of poor performance of a contract for procurement of construction works

In order to prevent the risk of loss in the event of non-fulfilment of the contract, the regulatory framework of public procurement provides for the right of the customer to request performance security. Analysing the regulatory framework of public procurement with regard to compensation for damages, it should be concluded that the Public Procurement Law restricts the customer in terms of the choice of the type of performance security.

According to the first part of Article 50 of the Law on Public Procurement, the Customer has the right to demand that the applicant submits or pays a bid security and performance security. On the other hand, the fourth part of the mentioned article stipulates that the Supplier has the right to submit the offer security and performance security as a bank guarantee, insurance policy or, if the customer has provided such a possibility in the procurement procedure documents, as a payment of a sum of money to the account specified by the customer. Thus, the law restricts the customer by providing the applicant with the option of choosing between offer security and obligation performance security. In the author's opinion, such a restriction should be justified. It should

be noted that the EU Public Procurement Directives (both 2004 and 2014 versions) do not regulate the possibility for contracting authorities to request financial guarantees from entrepreneurs participating in tender procedures - neither tender participation guarantees (offer security), nor contract performance guarantees. Thus, it is the freedom of action of each member state to assign a regulatory framework to such a requirement, taking into account that the usefulness and validity of such an instrument is recognised in practice and case law. As a matter of fact, guaranteeing the performance of obligations (guarantee or surety) is one of the types of reinforcement of obligations defined in the Law of Obligations part of the Civil Law.

However, can the regulatory act of public procurement regulate the content of a private law contract? As already mentioned before procurement, in the case of public procurement, the customer operates in two stages, where in the first, a public legal decision is made on awarding the contract, and in the second, the implementation of this decision takes place through private law – a procurement contract is concluded, to which the general rules of civil law are applied. Accordingly, the procurement regulatory act can regulate the content of a private law contract, but as far as it concerns the procurement procedure and the award of the contract, therefore, with regard to the security of the offer and only in those aspects that could directly or indirectly affect the award of the contract. For example, the law on public procurement determines the requirements for contract amendments or replacement of subcontractors, which in the case of an ordinary civil law contract should be determined by free agreement of the parties. In such a case, it is understandable, because making significant amendments to the contract also during the performance stage of the contract directly relates to the procurement procedure, because the amendments made, if they had been made at the beginning, could affect the results of the

procurement procedure. From this point of view, the conditional regulation of civil relations in public procurement regulatory acts is justified and justified.

However, as regards such contract conditions, which are linked exclusively to the stage of contract performance and do not in any way refer to the legality of the procedure previously carried out, according to the author, it is not correct to regulate civil legal relations within the regulatory framework of administrative law, i.e. to set restrictions on the customer regarding security funds for mitigating the risks of its contract performance. Thus, in the Public Procurement Law, there would be no restrictions for the customer regarding the choice of the type of contract performance security. Also from⁷⁷ the wording of Article 2 of the Law on Public Procurement (the purpose of the law is to ensure: transparency of procurement; free competition of suppliers, as well as equal and fair treatment of them; effective use of the client's funds, minimising its risk as much as possible.) it can be concluded that such a restriction in no way refers to openness of procurement, supplier competition or mitigation of customer risks, on the contrary, limiting the customer's choice of security means, the risk may increase in some cases. This can be explained by the fact that the credit institution's guarantee is a more effective guarantee for the customer, as it includes an unconditional guarantee, where in the event of non-fulfilment of the contract, the credit institution pays out the amount of the guarantee without any objections or the need for proof, contrary to the insurance company's policy, where the customer must prove the insurance case. And not infrequently, the procedural actions drag on long enough to cause additional losses to the client due to delays in project deadlines, as it is not possible to organise the engagement of another executor due to a lack of funding, for example, in cases where the initially agreed construction contractor does not want or is unable to promptly

⁷⁷ Law of the Republic of Latvia "Public Procurement Law". 29.12.2016. *Latvijas Vēstnesis*. 254 (5826).

continue the performance of the work. According to the author, it would only be necessary to determine the maximum amount of the contract performance security, because the contract performance security in any case creates an additional cost component in the contract, even though it is not directly stated in the offer. Therefore, a disproportionately high amount of compensation directly affects the efficient use of the client's funds, and such a regulation would meet the purpose of the Public Procurement Law.

When evaluating the legal aspects of compensation for damages, depending on what is stipulated in the contract, not only direct, but also indirect damages are taken into account. Regarding their recovery, court practice has developed over time, and findings have been established in jurisprudence. However, neither in court practice, nor in jurisprudence, in principle, such damages resulting from unobtained socio-economic benefits have not been addressed. When planning and implementing investment projects, legal entities under public law often develop technical and economic justifications for the need for such investment projects, evaluating not only costs and revenues, if any, but also socio-economic benefits, which are expressed in specific monetary terms and taken into account when determining investment return and justification. Therefore, in fact, the amount of such unobtained socio-economic benefits should be taken into account in the same way as indirect losses or lost profits, when assessing the negative impact of non-performance of the contract and thus also determining the amount of compensable damages. Determining the amount of unobtained socio-economic benefits may lead to certain difficulties, providing evidence of the validity of the calculations.

In the economic and legal literature, the classification of loss and damage overlaps, but the authors distinguish four criteria for assessing damage: 1) according to the nature of values, 2) according to the illegal activity and the ratio of damages; 3) according to the possibility of full compensation;

4) according to an accurate damage/loss assessment. The carried-out classification of the concept of damage confirms that the concept of damage is broader compared to the concept of loss, because in general, damage is understood as a negative impact on property and non-property values protected by law, the outcome of this impact. And damage according to the classification provided is understood as the end result of direct and/or indirect material damage.⁷⁸

Based on the authors' theoretical research, the essential conclusion is that damage is a broader concept compared to loss, as it includes both material losses and lost profits and includes not only financial but also other types of losses. Losses estimated in monetary terms are understood as losses. If the situation requires a more complex assessment and includes estimated and assessed actual losses, expected economic benefits, but unrealised opportunities, the concept of damage is used.

In order to assess the economic losses in all aspects, it is necessary to structure the assessment at two levels: micro (enterprise/industry context) and macro (national level). The assessment of economic losses at the micro level has been widely discussed both in court practice and jurisprudence. However, this assessment of economic losses at the macro level has not been widely practiced, so it is necessary to evaluate its theoretical and legal basis.

Losses at the macro level could be analysed from several aspects. First of all, the state budget suffered losses due to non-payment of taxes. For example, in the event that the construction contractor is unable to put the office building into operation on time, where there are a number of tenants who do not start economic

⁷⁸ Palekiene, O., Bruneckiene, J., Simanavičiene, Ž. 2014. Critical analysis of loss and damage concepts under process of economic assessment. *19th International Scientific Conference; Economics and Management, ICEM 2014*, 23–25 April 2014, Riga, Latvia. *Procedia – Social and Behavioral Sciences*. 156, 304–309.

activity within the planned period. However, the state budget may incur much more losses: 1) economic losses due to the absence of new jobs, 2) due to changes in the labour market, 3) due to inflation, 4) due to the shadow economy, etc. Each economic situation is different, depends on many factors, and is a detailed analysis of them is required in each specific case.

In order to objectively assess economic losses, the following applies: 1) evaluation of the causes, determining factors, and consequences of losses; 2) the beginning and end of the loss occurrence period; 3) to develop an assessment methodology adapted to each case (optimal set of micro/macro/financial indicators that allows quantifying economic losses).⁷⁹

The author would like to note that the concepts of “economic losses” and “forgotten socioeconomic benefits” should be distinguished separately, because the concept of “socio-economic” has a wider scope than “economic”, since one includes only economic aspects, the other also includes social components, or factors important to society, which cannot always be directly expressed in monetary terms.

In addition, the concept of “benefit” should be analysed. Evaluating the definitions available in the theoretical literature, the author can conclude that mining practically means any good that is obtained, regardless of whether it is directly or indirectly measurable in monetary terms. So, if we talk about the benefit of a public person when purchasing construction works, then they directly result from the needs of the society for which the relevant administration (customer) operates, from the direct functions to ensure the public interest, which is aimed at general development.

⁷⁹ Palekiene, O., Bruneckiene, J., Simanavičiene, Ž. 2014. Critical analysis of loss and damage concepts under process of economic assessment. *19th International Scientific Conference; Economics and Management, ICEM 2014*, 23–25 April 2014, Riga, Latvia. *Procedia – Social and Behavioral Sciences*. 156, 304–309.

The process of assessing foregone socio-economic benefits is a multidimensional process determined by various factors and circumstances. Therefore, there is no single method that is suitable for all situations. In each specific case, the same aspects as the initial assessment of the validity of investments must be evaluated, incl. expressing socioeconomic benefits in monetary terms. Of course, the question of how much damages should be compensated for the lost socio-economic benefits will always be debatable, since they are usually accepted and monetarily valued in the long term, incl. for a period of at least 10 years, which, for example, in the case of recovery of unearned profits, would be considered a disproportionately large amount.

When assessing the amount of compensation for loss or damage, it will be necessary to distinguish at what stage of construction the damage occurred, because it can actually be determined from this whether the customer will be able to realise the object within the planned period. Because sometimes the essential importance of the deadline can create a situation where the actuality of the object ends, i.e. it will no longer be possible to obtain the benefits for the user and, accordingly, the society, as was planned.

The author agrees with the opinion that not only the economic losses should be compensated, but also the unobtained benefits that the customer had hoped for, including what determines his well-being and expected comforts. By analogy, the same can also be applied to orders made by the state, where in case of improper performance, the customer does not obtain the benefit that he had hoped to provide to society, in accordance with its socio-economic interests, i.e. the planned socio-economic benefit that was not obtained would also be assessed and compensated in case of recovery of damages.

In any case, the economic calculation of damages must be derived from the benefit that the customer would gain from the implementation of the procurement contract. Depending on the length of the procurement subject's life

cycle, the bid evaluation criteria should also include all the quality dimensions that are expressed as a guarantee of the sustainability of the final result. It is most difficult to determine this for procurement items with a long life cycle (10 years and more), because it is necessary to be able to define the future needs of today's society, which in principle is impossible, taking into account how dynamically developing technologies, living standards and society in general are. Therefore, for long-term projects, Public-Private Partnership (PPP) may be more suitable for achieving such a goal, which, although it is not a new concept in the world, is not often applied in Latvia. The common feature in any PPP model is the fulfilment of value *for* money. On the other hand, determining the value corresponding to the investment is one of the most important components in making a decision on PPP implementation. Value for investment should, in principle, be a key aspect in traditional public procurement as well. Accordingly, regardless of whether the project is implemented using PPP or traditional public procurement, it is useful to implement it only if the benefit reaches the investment, while also ensuring the best price-quality ratio.

Taking into account the research and analysis carried out previously, the author has concluded that public-private partnership is one of the types of public procurement suitable for long-term investment projects, and also includes a sufficiently flexible opportunity to make improvements throughout the life cycle of the subject of the contract, enabling the fulfilment of all important public needs quality dimensions that should be able to be defined, evaluated and also monitored during the entire life cycle of the performance of the subject of the contract, so that it can most effectively ensure the goal of using public resources - the implementation of public interests in the most resource-efficient way possible in a long-term and sustainable way, including through the use of resource sharing concept in the framework of interdisciplinary public and private partnership. The aforementioned proves the author's Thesis that interdisciplinary

cooperation is critically important to determine all quality dimensions that should be assessed and evaluated during the entire life cycle of the contract, because in principle, to determine its needs, first of all, society itself must be involved, secondly, the definition of needs and considerations that determine the practical implementation of the proposed quality dimensions, methodology and also development forecasts should be based on science and validated, that is, a sustainable approach should be ensured, using both co-creation and co-creation methods.

Main conclusions and proposals

As a result of the conducted research, the goal of the work has been achieved and the work tasks have been fulfilled, incl. the concept of quality in the sphere of public procurement and construction is comprehensively known, determining the practical and legal aspects of quality assessment, based on which the author puts forward the following conclusions for defence:

1. Public spending through public procurement has a huge potential to positively influence the supply chain in all its stages, accordingly changing market trends in the field of socially responsible contract performance, thus also positively influencing the quality of life of society as a whole. Therefore, the assessment of social responsibility as a component of bid evaluation in public procurement is particularly important.
2. Evaluating the trends of public procurement today, public procurement in Latvia in terms of development is included in the first and second stages of the hierarchy of social responsibility, i.e. when preparing an offer, applicants focus primarily on obtaining maximum profit (stage 1), while the customer checks whether the applicant's offer meets all the requirements set out in the regulatory acts (second stage), incl. to the set standards, etc. Aspects such as ethics and the goal of making society better are not prioritised, in principle, as a goal to strive for, they are not put forward at all. Such an approach is fundamentally ineffective and characteristic of short-term thinking, which does not effectively implement the socio-economic and legal interests of the target group (society) in the long term.

3. In accordance with the needs of modern society and the need to ensure socio-economic sustainability, a fundamentally new approach to quality in public procurement can be distinguished, such as “approach based on societal values” or “approach based on social responsibility”, which in principle includes both the conformity of the product to the needs of the customer and society (technical quality), and the positive impact of the product production process on the environment and the quality of society’s life (social quality).
4. In practice and jurisprudence, the principle has been established that in the application of the criteria for choosing the most economically advantageous offer, only those aspects that are directly related to the performance of the specific procurement subject should be evaluated. However, such an approach covers the “needs of society” too narrowly, because the revenues and profits from the performance of the contract are used to ensure the economic activity of the supplier, including those that are not related to the performance of the specific subject of the contract. Thus, the company’s financial resources actually co-finance the economic activity of the supplier and it is in the public interest to use these funds as effectively as possible, not only in relation to the part of the funds that make up the cost of the performance of the procurement item (i.e. in relation to those resources and elements of the supply chain that are directly involved in the specific contract performance), but for the entire contract price as a whole. Thus, the elements of social responsibility should be evaluated not only in relation to the performance of the specific procurement subject, but to the applicant’s economic activity as a whole.

5. In practice, even after the introduction of the new Directive, customers apply the determination of the most economically advantageous offer as an algorithm for the selection of offers, evaluating both the offer price and other costs (e.g. cycle costs) and several other criteria related to the performance of the contract (e.g. performance period, guarantees time, etc.), determining the overall result as a summary rating for all criteria together. However, if the principle of “the best price-quality ratio” defined in the Directive is taken into account, the mentioned summary assessment approach is inappropriate, as it does not express “value” by definition. In addition, in the calculation of each individual criterion, the offer of the applicant is evaluated in relation to the offer of another applicant, so relatively.
6. The author, modelling various scenarios and criteria application algorithms (see the scenario modelling results in Appendix No. 1), concluded that the widespread evaluation algorithm, where the best offer is determined by contrasting it with the offers of the other applicants, is inherently inadequate, as it is thus impossible to determine the best price-quality ratio. Thus, the applicant’s position in the evaluation is determined by comparing the offers with each other, not the best price-quality ratio, for which the customer could achieve his goal.
7. Analysing the explanation of the evaluation criteria contained in the Directive, it can be found that it is repeatedly emphasised that when determining the best price-quality ratio, a relative value comparison, or comparative evaluation, should be performed. The directive does not indicate what this evaluation should be done, or in relation to the offers of other applicants, or in relation to the optimal needs defined

by the client or estimates of the maximum benefit or benefit that the client wants to receive, taking into account its financial capabilities (or the expected contract price).

8. In the regulatory framework of public procurement in Latvia, there is no reference at all to the best price-quality ratio as the primary method of evaluating offers, determining the most economically advantageous offer. In the author's opinion, the non-inclusion of such a concept in the national legal regulation also results in the fact that in practice the customers do not try to determine such a relationship but use the hitherto usual methods of determining the most economically advantageous offer.
9. In construction, quality for service and product is not evaluated separately. In construction, quality compliance with standards is assessed for both services and products together. Although the end result of construction is an object (building) intended to be used for the customer's needs, the construction process of this object (service) is also important. Namely, not only the quality of the result is important, but also the quality of the process.
10. Different dimensions of quality explain how the standard of quality correlates with the term "normal and customary" so often understood in civil law contracts. Accordingly, it can be concluded that the law, being subjective, does not continuously respond to the demands of the changing world, because the terminology is not changed accordingly. Thus, the quality standard of each construction project is different, taking into account the customer's expectations.

11. Depending on the length of the procurement subject's life cycle, the bid evaluation criteria should also include all the quality dimensions that are expressed as a guarantee of the sustainability of the final result.
12. Interdisciplinary cooperation is critically important to determine all dimensions of quality that should be assessed and evaluated during the entire life cycle of the contract, because in principle, in order to determine its needs, firstly, the society itself must be involved, and secondly, to define the needs and considerations that determine the set quality the practical implementation of the dimensions, the methodology and also the development forecasts, should be based on science and validated, that is, a sustainable approach should be ensured, using both co-creation and co-creation methods.
13. Looking from the prism of the purpose of public procurement – to always strive for the most effective result that can be achieved using public resources – it is critically important to ensure the effectiveness of this result not only in the short term, but also in the long term, ensuring durability and compliance with the conditions of the specific environment, so analogues as quality dimensions are variables that change along with society and the surrounding environment, the assessment of efficiency and the necessary changes must also be determined dynamically and decisions must be based on science, that is, weighed, tested and maximally safe, integrating into the operation such well-known approaches as circular economy, zero waste, circular business models (CBM), resource sharing, corporate social responsibility (CSR), etc., which have been recognised in world studies as a prerequisite for the efficiency of public administration.

14. Public administration is strictly regulated, with limited opportunities for experimentation, design thinking and co-creation. A transformation and reinterpretation of the legal base is needed to develop innovative governance models, implementing effective, community-driven management and sharing of public resources, not focusing on the cost factor, but on other forms of shared value, e.g. public benefits or environmental impact, including those not directly related to the performance of the specific procurement contract
15. Identifying the cooperation of interested parties already in the early phase of procurement planning, when starting interdisciplinary cooperation between the public and private sectors, can significantly positively influence the selection and application of quality criteria during the selection stage of suppliers/contractors. For example, the integration of construction by-products and waste management issues into the quality assessment matrix could be one of the more effective ways to improve the long-term indicators of qualitative benefits, since within the mentioned quality criterion it is possible to ensure not only the minimum measures to reduce the environmental impact by reducing the amount of waste through reuse in construction, etc. in the field of public procurement, the already widely known ways of reducing the impact on the environment, but in principle it is possible to create a multi-party cooperation mechanism for the realisation and operation of a specific building object, placing the responsibility not only on the executor, but also on the customer, creating institutional partnerships, etc.
16. Evaluating the ability of the modern public sector to implement sustainable public procurement in all its quality dimensions, it can be concluded that without interdisciplinary cooperation with

specialists in the field of procurement at a scientific level, it is impossible to define an algorithm of quality criteria in such a way as to assess the best price-quality ratio not only at the time of delivery, but also in a long-term perspective. Especially for procurement items with a long life cycle, i.e. 10 years and more, which is also typical of construction contracts. A critical factor to consider when developing a quality assessment algorithm is to be able to define the elements of quality in all its dimensions for the future society. In fact, the creation of such an algorithm requires modelling, developing assumptions and forecasts in the long term not only regarding the material and technical aspects, but also for the socio-economic and geopolitical aspects, for the development of which the customers simply do not have such professional capacity, accordingly, the attraction of scientific competence would be not only desirable, but even critical important.

17. cooperation models between the supplier and the customer is a certain challenge in the modern public administration sector, because it actually involves the diversification of the customer's role – in order to move from simply economically justified use of public resources to higher profitability indicators, the customer basically has to think like an investor, not just an administrator of public funds. Accordingly, interdisciplinary cooperation is an essential prerequisite, since the public sector does not have an "*investor approach*" in the use of funds. The investor's approach to the use of funds is focused on researching demand, creating demand forecasts, analysis of market participants, analysis of resource availability and supply chain, evaluation of socio-economic and geopolitical forecasts, etc. indicators that are the basis for decision-

making, while the focus of the public administration sector is basically on a certain providing functions at the lowest possible cost. And such an approach should already be in the procurement planning phase, that is, before a decision is made on the use of certain funds for a specific supply, or before investments are made.

18. Evaluating the potential of the Quintuple helix approach in the field of public procurement, evaluating it as a possible modification of the public-private partnership, it is concluded that a PPP based on the Quintuple helix is essentially impossible, because the public-private partnership is actually a civil law contract concluded as a result of an administrative process, which includes the specific rights and obligations of the contract participants. In the case of QHC, 4 cooperation parties can be identified – scientific institution, public institution (customer), supplier (commercial sector) and society (natural person as an individual or NGO representing public interests). On the other hand, the fifth element “Environment” included in the Quintuple helix cannot exist in any legal form as a partner of the partnership, because it does not have the legal capacity or capacity to act as a legal entity or a natural person. Thus, in the public-private partnership model, the Quintuple helix approach can exist only conceptually, defining the priorities and achievable goals of the cooperation participants.
19. Evaluating the requirements of the Public Procurement Law, Directive 2014/24/EU , etc. binding regulatory acts regarding the amendment of a public procurement contract, the author can conclude that within the framework of the mentioned regulations, the customer does not have any legal instruments to influence the performance of a contract concluded as a result of public

procurement, as the admissibility of amendments basically results only from such circumstances that the customer could not foresee in advance. The permissibility of amendments would not be based solely on the fact that the customer, like an investor, has analysed the market, made forecasts of changes, evaluated trends and, in order to maintain profitability, it is necessary to make appropriate improvements or adjustments.

20. When planning the implementation of long-term projects with a long life cycle and multifactorial impact on economic efficiency and implementation of public interests, the PPP procedure is suitable. However, after evaluating the classic PPP variations and risk redistribution mechanisms, the author concludes that the client's options and rights to modify the terms of the contract are still legally limited, if such a need arises from the development trends of the economic situation and other factors, because it is actually impossible to forecast for such a long period of time, what is the life cycle of the procurement item, that is, the needs of the future society can only be defined by the society itself in the relevant period of time. Thus, a PPP based on QHC modification is justified and essential for the long-term provision of public needs.
21. With regard to such contract conditions, which are related exclusively to the stage of contract performance and do not refer in any way to the legality of the previously performed procurement procedure, it is not correct to regulate civil relations within the regulatory framework of administrative law, i.e. to set restrictions on the customer regarding the means of security for mitigating the risks of contract performance.

22. Resource sharing is an effective way to increase sustainability and also profitability as it reduces costs for each party involved.
23. Traditional concepts of service planning and management are outdated and need to be revised to take into account resource sharing as an integrative mechanism and stimulus for resource mobilisation, a potential that is still greatly underestimated.
24. There are significant practical and legal restrictions for a public person to be able to freely pursue any interests important to the society, if the realisation of these interests does not directly correspond to the functions of the public person, even though this public person has free resources with the help of which these interests could be pursued in a maximally qualitative and effective way. In principle, the formal separation of public administration functions prevails over the purpose for which public administration is necessary at all.

As a result of the conducted research, the author puts forward the following proposals for defence, which need to be implemented to ensure quality in all its dimensions in the field of public procurement and public-private partnership in the Republic of Latvia:

1. The definition of the concept of quality must be included in the public procurement regulations in the following wording:

Article 1 of the Public Procurement Law:

16¹) Quality – the set of features characterizing the procurement object, which most effectively ensures the implementation of the socio-economic and legal interests of the target group (society) throughout the life cycle of the procurement object.

Existing point 16¹) to 16²) should be adjusted sequentially.

Article 1 of the Law on Procurement of Public Service Providers:

16¹) Quality – the set of features characterizing the procurement object, which most effectively ensures the implementation of the socio-economic and legal interests of the target group (society) throughout the life cycle of the procurement object.

Existing point 16¹) to 16²) should be adjusted sequentially.

Article 1 of the Public-Private Partnership Law:

41) Quality – the set of features characterizing the procurement object, which most effectively ensures the realisation of the socio-economic and legal interests of the target group (society) throughout the life cycle of the procurement object.

Article 1 of the Law on Procurements in the Field of Defence and Security:

22¹) Quality – the set of features characterizing the procurement object, which most effectively ensures the implementation of the socio-economic and legal interests of the target group (society) throughout the life cycle of the procurement object.

2. Public procurement regulations should stipulate that the right to conclude a contract is awarded by determining the best price-quality ratio, amending accordingly:

Article 51 first part of the Law on Public Procurement, expressing it in the following wording:

(1) The customer grants the right to conclude a procurement contract to the applicant whose offer is evaluated as the most economically advantageous, determining the best price-quality ratio.

Article 57 first part of the Law on Procurement of Public Service Providers, expressing it in the following wording:

(1) The public service provider grants the right to conclude a procurement contract to the applicant whose offer is evaluated as the most economically advantageous, determining the best price-quality ratio.

Article 26 of the Security and Defence Procurement Law with the fourth part in the following wording:

(4) The most economically advantageous offer is evaluated by determining the best price-quality ratio.

Article 1, subsection 31 of the Law on Public-Private Partnerships, by adding the words “determining the best price-quality ratio”, to the following wording:

31) the most economically advantageous offer – a criterion for choosing an offer that takes into account factors such as delivery or contract performance deadlines, operating and other costs, their efficiency, quality of construction works or services, aesthetic and functional characteristics, compliance with environmental protection requirements, technical advantages, spare parts availability, supply security, price and other factors related to the subject of the concession contract, which must be specifically expressed and objectively comparable or evaluated, determining the best price-quality ratio;

3. A similar way as in the manufacturing sector, the quality of the procurement item must be emphasised in the public administration sector through the prism of costs, i.e. the presence or absence of some cost quality during the operation of the product. The Directive should specify that *for determining the best price-quality ratio, the comparative evaluation should be performed in relation to the*

values defined by the Customer – the threshold values of the evaluation criteria.

Algorithm proposed by the author:

$$\begin{array}{c} \text{Best price – quality ratio} \\ \downarrow \\ \frac{\text{Estimated price – offered price} \times 100}{\text{Estimated price}} \\ + \\ \frac{\text{Evaluation of quality offered} \times 100}{\text{max (expected) quality (points)}} \\ \downarrow \\ \text{Lowest price per one quality unit} \end{array}$$

4. In order to prevent the regulatory framework of administrative law from regulating civil legal relations, i.e. imposing restrictions on the customer regarding the means of security for mitigating the risks of the performance of the contract, the Public Procurement Law would not set any restrictions on the customer regarding the choice of the type of security for the performance of the contract, and accordingly the fourth paragraph of Article 50 in part, the words “*and performance security*” should be deleted.
5. Public property for free use should not be limited if it is necessary for the implementation of projects of national importance, since their importance in itself justifies the implementation of important public interests. The second part of Article 5 of the Law “Law on Prevention of Squandering of the Financial Resources and Property of a Public Person ” should be supplemented with subsection 5¹), expressing it in the following wording:
“5¹) a public person transfers his property to a private person or a capital company for the implementation of projects of national importance;”

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