

Assessment of E-Procurement of Construction Products and Services

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ABSTRACT

According to Presidential Regulation No. 54 of 2010 governing Procurement of Government goods/services and its revisions, this research seeks to assess the efficacy of e-Procurement using e-Tendering procedures. Qualitative methods were used in this investigation. The information was gathered through conducting in-depth interviews with members of the procurement committee, as well as providers, companies, and relevant documents. Descriptive case and context analysis is employed for this analysis. The review of the e-procurement implementation at the North Maluku PUPR Construction Services selection implementation center revealed that the process had gone smoothly. This is evident from the study of e-several procurement's dimensions and the various means through which its goals might be attained. Presidential Regulation No. 4 of 2015 governs the use of e-Procurement. Human resources in the Working Group were found to be a positive factor in terms of e-viability Procurement's in this study's findings, while a lack of socialization, a dearth of LPSE human resources, an absence of training, inadequate infrastructure, frequent updates to the SPSE application's version, a lack of regional regulations governing the electronic procurement of goods and services, and a lack of funding were found to be negative factors.

ABSTRAK

Berdasarkan Peraturan Presiden No. 54 Tahun 2010 tentang Pengadaan Barang/Jasa Pemerintah dan perubahannya, penelitian ini berupaya menilai efektivitas e-Procurement dengan menggunakan prosedur e-Tendering. Metode kualitatif digunakan dalam penelitian ini. Informasi tersebut dikumpulkan melalui wawancara mendalam dengan anggota panitia pengadaan, serta penyedia, perusahaan, dan dokumen terkait. Kasus deskriptif dan analisis konteks digunakan untuk analisis ini. Kajian pelaksanaan e-procurement di pusat pelaksanaan seleksi Jasa Konstruksi PUPR Maluku Utara mengungkapkan bahwa proses tersebut berjalan lancar. Hal ini terbukti dari studi tentang beberapa dimensi pengadaan elektronik dan berbagai cara untuk mencapai tujuannya. Peraturan Presiden Nomor 4 Tahun 2015 mengatur tentang penggunaan e-Procurement. Sumber daya manusia di Pokja ditemukan sebagai faktor positif dalam hal e-viability Procurement dalam temuan penelitian ini, sementara kurangnya sosialisasi, kelangkaan sumber daya manusia LPSE, tidak adanya pelatihan, infrastruktur yang tidak memadai, seringnya pembaruan untuk Versi aplikasi SPSE, kurangnya peraturan daerah yang mengatur pengadaan barang dan jasa secara elektronik, dan kurangnya pendanaan ditemukan sebagai faktor negatif.



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INTRODUCTION

Obtaining products and services for use by federal, state, and local government agencies is known as "procurement," and it involves a series of steps beginning with needs planning and ending with the delivery of those goods and services (Faisal et al., 2017). It manifests itself in a number of ways, one of which is the mandatory use of electronic procurement of government products and services. This demonstrates that parties with knowledge in the procurement process are responsible for supplying government agencies with the goods and

services they require in a timely manner and in accordance with current legislation (Mulyono, 2017).

Products and services provided by APBN/APBD-funded ministries, institutions, and regional apparatuses, beginning with the identification of needs and ending with the delivery of completed work. Acquiring products and services from vendors and other collaborators following formalized processes mandated by laws and regulations. Purchasing goods and services for the government include a wide range of government spending categories such as infrastructure development, building construction, consultancy, and more (Presidential Regulation No. 16 of 2018 concerning Procurement of Government Goods and Services).

E-Procurement is defined by Abidin (2011) as "the acquisition of products and services through the use of information technology and electronic transactions in compliance with applicable legal requirements."

To fulfill the goals of introducing electronic Government Goods/Services Procurement, the Electronic Procurement System (SPSE) was developed. Now, the SPSE offers e-Tendering, a transparent process wherein all SPSE-registered SPs can participate by submitting 1 (one) bid within the specified time and according to the SPSE's predetermined criteria (Erlina, 2019). To further facilitate the paperless acquisition of goods and services for the government, an E-Purchasing system has been developed. Features for printing orders for Government Goods/Services Products, downloading the format of the order letter/agreement letter, and uploading scanned results of the signed contract are all included. The acquisition of government goods and services can be made more effective and open with the help of electronic purchasing (Samudra & El Unas, 2014).

Several barriers to the e-procurement system are revealed by the findings of Toktaş-Palut (2014), including insufficient IT infrastructure from suppliers/business partners, a lack of technical personnel in IT infrastructure, and a lack of understanding of competent personnel. So, businesses that want to overcome this barrier to embracing e-procurement must place increased emphasis on IT infrastructure, supply chain, skills, and human resource competencies. Moreover, Eadie Robert (2017) investigates the motivations for and obstacles to e-procurement in Northern Ireland's construction services. The examination of e-procurement use in Northern Ireland and Australia shows that the ranking of the driving reasons and the inhibiting factors is different across the two nations. The first ranking demonstrates that while Australia sees adopting e-procurement to decrease administrative expenses, Northern Ireland sees poor or non-collaborative communication as a major difficulty in the construction industry related to implementing e-procurement.

According to Gunasekaran's studies (2019), there are still challenges in implementing e-procurement, such as a lack of resources, management buy-in, and e-procurement expertise and system security know-how. From this historical context, the researcher deduces that greater service to goods and services procurement operations is the major purpose of e-procurement deployment. E-procurement is a movement in government that uses electronic-based technologies to combat corruption, collusion, and nepotism. Specifically, researchers are interested in determining whether or if the use of e-procurement can boost the efficiency of auctions for acquiring goods and services, benefiting both the auction's organizers and the providers of those products and services.

To foster healthy competition, the Construction Service Selection Implementation Center for the North Maluku Area implements e-procurement by holding as few face-to-face meetings as possible between the committee and service providers. Everything from publicizing the

auction to registering participants, explaining the tender documents (aanwijzing), submitting and opening bids, assessing bids and qualifications, and finally determining and announcing winners is done digitally.

Government and business organizations both use auctions, or procurement, to acquire products and services. An agency or institution's procurement process begins with need planning and continues until all operations related to acquiring the desired goods and services have been carried out (Astuti, 2016). A bid to submit prices and purchase up work for the supply of goods/services is translated as "procurement" in the Large Indonesian Dictionary.

When it comes to purchasing goods and services for the government, Indonesian law is taken into consideration, as stated by Suherman (2010). (a). Strategic meaning can be derived from the government's buying of products and services in terms of the promotion and safeguarding of state-owned businesses (b). The government's spending on goods and services is a major contributor to economic expansion (c). By conditioning the actions of the three arms of government, the private sector, and the community in implementing good governance, a government goods and service procurement system that can apply the principles of good governance will enhance the efficiency and effectiveness of public spending.

E-Procurement refers to the process of acquiring products and services through the use of IT and electronic transactions in compliance with applicable law, as defined by Croom (2017). E-Procurement refers to the process of buying and selling products or services online using a website. Ngai states that electronic procurement, or e-Procurement, is a method of acquiring products and services using the internet. Procuring goods and services over the internet or an intranet, or via an electronic data interchange (EDI), is what we call electronic procurement (eProc) in 2018. (EDI). While Intari (2021) E-Procurement is an online auction platform for government product procurement via electronic means of information and communication.

The goals of the acquisition of goods/services are laid out in Article 4 of Presidential Order Number 12 for the YEAR 2021. maximize the return on investment (ROI) of every dollar spent by optimizing quality, quantity, timing, cost, location, and Service Provider; b. Use more of our homegrown goods; c. improve the number of MSEs, SME, and cooperative businesses; d. the elevation of national Business Actors; e. encouragement of the dissemination of research findings and the use of research-based products and services; f. growing involvement in the arts and culture sector; g. improve economic fairness and open up new avenues for enterprise; H. Sustainable Procurement should be improved (Lubis, 2014).

Batenburg (2007) identifies as its primary goal the enhancement of openness and responsibility in the procurement process via electronic means. 2). The expansion of consumer choice and rivalry among businesses. 3). Make the purchasing procedure more effective. 4). Back up the checking and examining procedures. 5). Satisfy the requirement for cutting-edge knowledge.

While Hardjowijono in Thaib (2022) argues that e-macro Procurement's benefit is to facilitate the development of corrupt-free and nepotistic-free administration, the new system's direct benefit is a reduced procurement cycle time, reduced administrative burden, and reduced procurement costs.

Despite the difficulties that may arise, e-procurement demonstrates the potential of technology to help find and implement solutions to issues in the government's acquisition of products and services. Among the many advantages of electronic procurement is: 1. Electronic purchasing widens consumers' ability to shop, and it promotes competitive pricing

(transparency, better prices, and better interaction patterns). 2. The convenience and safety of e-procurement are two other benefits. Peace of mind knowing that the winning supplier of products or services has competed in an open and honest bidding procedure thanks to the electronic regulation of the procurement process, which places a premium on openness and accountability. 3. E-procurement also helps alter the mindset of business actors to foster a culture of constant improvement in skill. 4. Further, unexpected advantages of e-procurement are also provided. Every step of the procurement procedure is documented in the system, from the first call for bids to the final selection of a victor. 5. From a variety of e-Procurement perspectives, and with a growing focus on IT infrastructure, performance metrics for government procurement of goods/services can be tracked and evaluated with the use of e-procurement. 6. E-procurement also provides an opportunity for all stakeholders to increase their familiarity with and comfort with modern information technologies.

According to Manuhutu (2014), there are various prerequisites for successful e-procurement deployment. Procurement efforts should prioritize efficiency over quantity in order to meet deadlines with as little resources, costs, and downtime as possible. In a nutshell, and in a way that allows them to contribute fully to the state's welfare through proper accounting. 2. Dependable in meeting defined requirements and capable of yielding anticipated advantages. 3. Fair competition is achieved by vetting and selecting suppliers on the basis of their ability to deliver products or services that are of comparable quality and that meet clearly defined standards and guidelines. 4. Transparent All provisions and information pertaining to the procurement of goods or services, including the technical requirements for procurement administration, evaluation procedures, evaluation results, and determination of potential providers of goods or services, are available to participants who are interested in providing goods or services, as well as the general public. 5. Be accountable for the timely and accurate execution of supply chain management concepts, policies, and provisions, as well as the achievement of physical and financial goals.

It is understood that there is a high potential for wasting APBN funds when actually making purchases. Because to the high risk of KKN in Indonesia's government procurement system, a significant amount of money might be lost while purchasing products and services for the government (Widiarti, 2022). E-procurement is defined as an online auction platform that utilizes digital resources (such as the internet) to source products. E-purchase is essential for the proper execution of a company's procurement of products and services, which in turn improves and guarantees the efficiency, effectiveness, transparency, and accountability of the company's monetary outlays.

"E-procurement will more or less aid some of the contact procedures with bidders by boosting effectiveness and efficiency in managing the government procurement process of goods/services," as stated by Nugroho (2013). The benefits of e-procurement can be greatly increased with proper and thorough implementation. E-procurement is the only method that can reduce the amount of time spent on acquiring products and services, allowing for more timely delivery of project deliverables. Eadie (2017) recommends that numerous characteristics, including efficiency, effectiveness, competition, transparency, and responsibility, should be addressed to enable the deployment of e-procurement.

Abidin (2011) argued that information technologies that facilitate the acquisition of products and services are integral to the e-Procurement process. Organizational information systems serve the demands of everyday transaction processing, operational support, management and strategic activities, and the reporting requirements of select stakeholders

outside the business. Reports have many purposes, including holding the responsible party accountable, providing a foundation for leadership to make policies and choices, facilitating supervision, serving as a learning resource, and sharing the author's experience with others.

RESEARCH METHOD

This study takes a qualitative approach since it allows researchers to have a bird's-eye view of the occurrences that occur in their subjects. Officials at the Construction Services Selection Implementation Center of the Ministry of PUPR North Maluku Region and crucial informants from provider firms are the primary sources of information for this study. Interviews and written records are two of the methods employed to gather information for this study. Data reduction, data presentation, and conclusion drawing are the three interrelated steps of the research's data analysis approach. In order to draw and verify results, data reduction is a type of analysis that condenses, sorts, guides, eliminates, and organizes data. Tables, graphs, flowcharts, pictograms, etc., are all valid methods of data presentation in qualitative research. Data presentation allows for easy organization and arrangement of data in a relationship pattern for the benefit of the reader. In qualitative research, drawing conclusions is the last phase. Problems and problem formulations in qualitative research are still transitory and will grow after the research is conducted in the field, but according to Sugiyono (2017), the conclusions in qualitative research can address the formulation of problems formed from the start.

RESULTS AND DISCUSSION

The North Maluku BP2JK ULP Working Group's Electronic Procurement Service (LPSE) operations are evaluated throughout 5 (five) stages based on the principles of openness, competition, fairness, and non-discrimination. According to Zahratul Rufida Kasim (informant 1), the study's primary informant and the head of the BP2JK ULP Working Group, the following responses were gleaned:

"The user's procurement of goods and services is an attempt to actualize the goods and services he desires, utilizing certain procedures and processes to reach an agreement on price, time, and other accords. This effort is referred to as "procurement." Electronic-based goods and services procurement is a concept that has been regulated by the government. It is included in the Regulation of the Minister of Public Works and Public Housing of the Republic of Indonesia Number 14 of 2020 concerning Standards and Guidelines for Procurement of Construction Services Through Providers and Regulation of the Government Goods / Services Procurement Policy Agency of the Republic of Indonesia. The purpose of this concept is to reduce or minimize irregularities that occur during the conventional procurement of goods and services.

The auction announcement stage includes 5 (five) dimensions, namely, transparency, accountability, open, competitive, and fair/non-discriminatory. The results of interviews with informants can be described as follows:

Transparency in Tender Announcements

Information transparency and clarity are two variables that contribute to the transparency principle. b) Consistent data among service providers. Details about auctions may be quickly located and retrieved. The SPSE application has been used by the ULP BP2JK North Maluku working group to announce the online auction. Every information provided by the auction committee in the application is easily accessible to all potential bidders. The interview findings of the supplier Mr. M. Irfan Fuadi Ibrahim corroborate this:

"As service providers, we find the bidding and selection process here to be fair and efficient. In addition to the traditional method of making the announcement through print media or newspapers, the announcement is also published online so that it can be quickly accessed by as many people as possible."

Mr. Amrin Amin additionally received the following information from the supplier after the interview snippet was transcribed:

"With this digital approach, making announcements on the internet is considerably simpler and more open. With this setup, we can access all the details of the upcoming auction without ever having to set foot in the ULP office. There is a lot of openness regarding the auction's prerequisites, restrictions, and timetable of phases."

According to the supplier, the e-procurement auctions were announced explicitly and significantly based on the outcomes of interviews with the two sources above. In 2021, up to 12 procurement packages with a total budget ceiling value of Rp. 74,570,439,000 were announced, and in 2020, up to 7 packages with a contract value of Rp. 30,844,402,000 were announced, demonstrating transparency in auction announcements. In table 1, you can see how much money the North Maluku BP2JK ULP Working Group has spent on various packages of procurement so far.

Table 1. Procurement Packages implemented and announced by the ULP BP2JK Working Group

Types of Procurement Packages	Number of Year Packages		Package / Contract Value (Rp)	
	2020	2021	2020	2021
Procurement of goods				
Construction Work	6	7	30.071.105.000,00	63.762.673.000,00
Procurement of Consultancy Services	1	5	773.297.000,00	10.807.766.000,00
Total	7	12	30.844.402.000,00	74.570.439.000,00

Source: LPSE, 2022

Accountability in Announcement of Auctions

There are three indications that make up the accountability metric: a) the capacity to upload procurement document files, b) electronic announcement of auctions, and c) adherence to processes and requirements. This is a summary of the committee interviews' findings.

Procurement document files can be submitted (uploaded), and the announcement stage is sufficient by the regulations. Accountable in the auction announcement stage at BP2JK North Maluku is done electronically and within at least seven working days. Unfortunately, system disruptions in the SPSE program continue to present challenges and barriers while uploading procurement papers. The provider based this on the findings of an interview with Mr. Imran Hi. Ali.

"We have to keep repeating ourselves multiple times because the SPSE application frequently has system problems when we try to upload procurement documents, especially if the broadcast time for the procurement package is simultaneous. This technical issue necessitates an extension of the announcement's broadcast time, which is especially problematic if the announcement is scheduled for a weekend."

According to interviews conducted on the topic, the accountability principle has been met in the publication of the goods and services e-procurement auction scheduled for 2021. For transparency's sake, the committee also announces the auction via the SPSE app in accordance with the relevant statutes and regulations concerning the acquisition of goods/services.

Opens in Auction Announcement

Two aspects of an open auction announcement are the lack of restrictions on potential bids and the transparency with which the announcement is made. For transparency, the ULP Working Group has announced the auction via electronic media, and the SPSE application is available worldwide with no restrictions on who can use it or where it can be used, so all interested service providers can see exactly what is going on.

In accordance with the relevant statutes and regulations, the BP2JK North Maluku Procurement Service Unit (ULP) Committee for the Selection of Construction Services has completed all stages of the electronic procurement of goods/services (e-procurement). Mr. Imran Hi. Ali, the service provider, has stated the following:

"Since the public could view each procurement package regardless of physical location, "this announcement," delivered through internet media, was exceedingly open, clear, and transparent"

The interview data presented above suggests that the supplier participating in the e-procurement auction's announcement phase is extremely forthcoming in that it may be reached via the SPSE application. In addition, the domicile of the supplier is irrelevant to its eligibility to participate in the auction, so long as it satisfies the requirements outlined in the procurement contract. These interview snippets from Mr. Amrin Thalib, the auction's designated reviewer, expand on the transparency that accompanied the announcement of the sale:

"Pokja makes announcements extremely freely and transparently; all information requested by the bidding service providers must be provided," for instance, "Pokja notifies the winner, the first reserve winner, and the second reserve winner (if any) as necessary during the announcement of the tender."

Compete in Auction Announcements

Tender competition features a) improved bidding conditions and b) no outside interference. Based on our conversation, we now know that Mr. Fuad Halim is the provider and that;

"The working group does a decent job of encouraging healthy competition throughout the actual selection process, but intervention does occur, albeit on a modest scale."

Further information from his conversation with Ms. Lia Pratiwi w. Wardani in her capacity as Admin of Procurement of Products and Services:

"The ULP working group does not interfere and treats all bids equally in an effort to foster healthy competition within the framework of the rules that apply to all bidders. All choices made are the result of a pristine selection procedure."

Discriminatory justice in tender announcements

As a member of the ULP Working Group, Mr. Muchlisi stated in an interview that;

"The selection committee, of course, always operates in accordance with the principles of fairness outlined in the rules governing the purchase of products and services. If we are unfair in this selecting process, we will face serious consequences."

Mr. Armansyah, in his capacity as a youthful expert in the acquisition of products and services, similarly conveyed:

"After all, the one who decides the auction conditions is the authorized official (contract signing official), led by the applicable rules, therefore the subject of discrimination can be claimed not to exist if the working group as the organizer applies the rules fairly."

This study's findings suggest that different informants had different understandings of what happened during the auction, with the working group coordinating with the Activity Implementing Officer (PPK) to establish the requirements for the auction that would serve as the basis for the tender for the procurement of goods and services. In terms of procurement, there will be no bias. This is made feasible by the ULP Working Group's ability to carry out the provisions outlined in the participation requirements, which include qualification standards, administration, and technical requirements for bidding papers. There can't be any preferential treatment for one service provider in the terms.

Discussion

Auction Announcement Stage

The study found that the ULP BP2JK Working Group for the North Maluku region in 2021 had generally implemented the principles of transparency, accountability, openness, competition, and fairness/non-discrimination throughout the stages of bid announcements for procuring goods/services via e-procurement. These are the Standards and Guidelines for the Procurement of Construction Services through Providers, issued by the Indonesian Ministry of Public Works and Public Housing, and the Guidelines for Implementing Government Procurement of Goods and Services Through the Provider, issued by the Indonesian Government Procurement Policy Agency in Regulation No. 12 of 2021.

The ULP BP2JK North Maluku Working Group for 2021 has demonstrated their commitment to open bidding by providing details about the upcoming auctions for procurement of goods/services, construction, and consulting services through the SPSE application for announcement packages of 12 packages with a total budget ceiling value of Rp.74,570,439,000.

Very good accountability is a hallmark of this organization. The "Regulation of the Minister of Public Works and Public Housing of the Republic of Indonesia Number 14 of 2020 concerning Standards and Guidelines for the Procurement of Construction Services through Providers and Regulation of the Republic of Indonesia Government Goods/Services Procurement Policy Agency Number 12 of the Year 2021 concerning Guidelines for Implementing Government Goods/Services Procurement Policy" make it possible to create such accountability indicators.

The committee has evaluated the implementation once the auction notice has been sent out electronically for at least seven business days. In order to submit bids, providers can use the program to upload procurement document files. This is according to "article 11 paragraph 3.9.a Selection with Prequalification of Other Goods/Services" of the Government of the Republic of Indonesia Goods/Services Procurement Policy Agency Regulation Number 12 of 2021 concerning Guidelines for Implementation of Government Goods/Services Procurement Through Providers.

Excellent procurement of products and services requires adhering to the notion of accountability. The committee and providers' answers and impressions of the auction announcement were rated as excellent or very good based on interview data examining the fair/nondiscriminatory feature. according to the Standards and Guidelines for the Procurement of Construction Services through Providers (Regulation of the Minister of Public Works and Public Housing of the Republic of Indonesia No. 14 of 2020) and the Guidelines for Implementing Government Procurement of Goods and Services Through Providers (Regulation of the Government Goods/Services Procurement Policy Agency of the Republic of Indonesia No. 12 of 2021).

Auction Registration

Electronic procurement eliminates the need for physical meetings during the registration process for auctions. An LPSE-issued user ID and password are required to complete the online registration process within the SPSE app. According to the study's findings, the PUPR 2021 committee and providers of goods/services procurement have adhered to the standards

and guidelines for the procurement of construction services through providers and the Regulation of the Republic of Indonesia Government Goods/Services Procurement.

Key informant interviews revealed that the PUPR Center for the North Maluku region had operated transparently on the dimension of bid registration for the procurement of goods and services. This is shown by the availability of information and the ease with which it may be obtained for participation in auctions. In addition, there can be no discrepancies in the data given to various potential service providers; all of the information gathered must be uniform and open. Accessibility of the terms and conditions of the procurement document in accordance with the rules governing the purchase of goods and services is also emphasized as part of an open registration process. This procurement document includes the contract's general and specific terms, as well as a count of the required number of sample forms. Bidders should review the committee-approved tender materials before completing the registration process.

Auction Explanation or Explanation

The ULP Committee or Working Group explains the Auction process to potential service providers who will be asked to fill out procurement-related questionnaires. Transparency, accountability, openness, competition, and fairness/non-discrimination are the principles used to evaluate the auction description in this research.

Findings on the accountability scale place it in the "accountable" or "good" range of ratings. The committee and respondents completed the job description phase of the process online, rather than meeting with the provider in person. The committee responds to questions from providers when they are asked, rather than compiling questions in advance. Both the Committee and the Provider confirmed that the stages of explanation were adequate, as required by the provisions of Regulation No. 14 of the Minister of Public Works and Public Housing of the Republic of Indonesia for 2020 and Regulation No. 12 of the Policy Agency for the Procurement of Goods and Services Procurement of the Government of the Republic of Indonesia for 2021.

The findings of the study show that the committee's response time to queries remains too slow relative to the time it takes for providers to obtain the replies. This is due to the fact that some service providers continue to ask the same questions despite the fact that the committee can only answer those that have not yet been answered.

Submission and Opening of Bids Evaluation of Bids and qualifications

Providers who are already candidates submit their bids in the form of electronic documents first. Documents are only made available to the committee via the LPSE website; they are never sent to the committee in hard copy. Bids for PUPR 2021's procurement of goods and services will be entered and opened with exceptional transparency. This is evidenced through being welcoming, transparent, and straightforward. In addition, there can be no discrepancies between the data acquired and the data presented to each potential provider. This is done so that the public has faith in the auction process and irregular implementation is avoided.

All participants in a selection process must comply with the terms outlined in the Tender/Selection Documents in order to submit a bid. Before the submission deadline, bidders can resubmit their files to update or replace any that were already submitted. The bid must be submitted by the firm serving as the lead in any consortium, joint operation, partnership, or

other form of collaboration. The Selection Working Group may extend the time allotted for bid submission only if: a. Unforeseeable events arise that are beyond the control of the parties; b. There were technical difficulties with SPSE; c. More time is needed to prepare the bidding materials due to changes in the selection documents; or d. Everyone who was required to make a bid did so by the specified time. If no Participant submits a bid by the deadline, the Selection Working Group may set a new deadline for receiving bids. The bid submission deadline and the time extension take place on the same day. After the extended deadline has passed, the Tender/Selection shall be considered unsuccessful if no bids have been submitted. If the deadline for submitting bids is extended, the Selection Working Group must provide SPSE with justifiable justifications.

Bid Evaluation and Qualification Stage

Overall, the Government's use of e-procurement throughout the review of bids and qualifying of supporting documents has been highly successful. In the opinion of the committee and the providers, the level of transparency is quite high. The principle of openness in reviewing bids and qualifications stresses that all information and conditions related to the evaluation of bids and qualifications are openly communicated and available to all providers.

The committee and providers believe that the electronic examination of bids and qualifications for PUPR's North Maluku region procurement in 2021 will be highly accountable. Bids are evaluated by the committee based on the procurement documents; document validation qualifications are conducted offline between the committee and providers; the bid and qualification evaluation stages are adequate; and the provisions of Regulation of the Minister of Public Works and People's Housing of the Republic of Indonesia Number 14 of 2020 and t.

Once bids have been submitted, a process known as post-qualification is initiated to assess the applicants' qualifications. Providers are put through post-qualification checks during the implementation of the selection process in the ways described below: a. a. Request bids for other goods/services in the interest of straightforward acquisition; b. A Pick and Choose of Non-Construction Consulting Services. Qualifications are evaluated using the knockout method at the same time that administrative evaluations are implemented. Competence, business viability, and the capacity to meet the requirements as a Provider as laid forth in the Bidding Document are all taken into account during the evaluation process. If a candidate meets all the criteria, they will be considered successful and awarded the qualification. Both the winners and the reserve winners had their post-qualification status verified. If the winners and reserves don't make the cut, the next-in-line contestants will have their qualifications verified (if any).

According to the research results presented in the Policy Institute for Procurement of Goods/Services of the Government of the Republic of Indonesia Number 12 of 2021 on Guidelines for Implementing Government Procurement of Goods/Services Through Providers, it is challenging to prove intervention in the evaluation stage of this offer and qualification. In addition, the committee had more time to review the proposals, including those from service providers whose proposals were disqualified. The committee claimed it had operated impartially and in accordance with the rules because all service providers had equal access to the SPSE application, where the reasons for abortion (whether technical, administrative, or financial) were listed. One of the causes of these issues is that bidders do not fully comprehend the procurement method or the regulations and rules that must be followed.

Determination and Announcement of Winners

Through e-procurement, the North Maluku PUPR regional office government in 2021 has successfully reached the point of determining and notifying the winner. This signifies that the principles of e-procurement, such as openness, competition, fairness, and non-discrimination, have been followed in the process of selecting winners and making their selections public.

Get a verifiable mean price at the time the auction is announced. Indicated by the statement by the Committee preparing and announcing the Minutes of Tender Results (BAHP) via the application, this means that the process of determining and announcing the winners has been carried out in an accountable manner, the results of determining and announcing the winners can be accounted for, and the stages of determining and announcing the winners are sufficient and in accordance with the rules for the procurement of goods/services.

This means that there are still some perceptions from respondents in carrying out the process of determining the winner, especially in the statement "in determining and announcing the winners, the committee does not apply discrimination," which receives the lowest average score of the other dimensions at this stage. Nonetheless, there is still discrimination in the selection of providers in the Government's e-procurement process.

Consistent with other studies (Basmar, 2017; Mokoginta et al., 2017; Unra, 2015; Widiarti, 2022), this one finds that e-Procurement deployment affects the purchasing of products and services. As a result, the products and services procurement committee and other staff are better able to carry out their jobs and keep things on track.

CONCLUSIONS

Research results discussed in light of the concepts of openness, accountability, transparency, competition, and fairness/nondiscrimination led to the following conclusions: 1. The principles of transparency, accountability, openness, competition, and fairness/nondiscrimination have been implemented throughout the stages of auction announcements in the implementation of electronic procurement of construction goods/services (e-procurement) at the Construction Service Selection Implementation Center of the Ministry of PUPR for the North Maluku Region in 2021. 2. In general, the objectives of transparency, accountability, openness, competitiveness, and fairness/nondiscrimination outlined in Presidential Decree Number 12 of 2021 have been met at each level of the bid registration process. 3. The steps of the job description adhere to the nondiscriminatory, fair, open, competitive, and transparent standards outlined in Presidential Decree No. 12 of 2021. 4. Presidential Decree Number 12 of 2021 requires that all phases of the procurement process, including the submission and opening of bids, adhere to the following principles: transparency, accountability, openness, competition, fairness, and nondiscrimination. However, the findings also show that further study is needed to perfect its implementation, as providers view the committee as biased because their bid document files are frequently inaccessible when bidding begins. 5. As required by Presidential Decree No. 12 of 2021, both the bidding and qualifying evaluation processes have adhered to the highest standards of openness, fairness, and nondiscrimination. 6. As required by Presidential Decree 54 of 2010, the entire process of selecting and announcing the successful bidder has adhered to the highest standards of openness and transparency.

Many recommendations are given based on these findings: 1. Increasing network capacity in the electronic goods/services procurement system is necessary to facilitate the

uploading of procurement documents during the tender announcement stage and thereby overcome issues caused by network outages. 2. The Procurement Service Unit (ULP) and the Decision Making Officer (PPK) work to enhance collaboration with related disciplines to ensure that customers' needs are taken into account when developing technical specifications and that investigations and analysis do not converge on a single vendor. 3. In order to have a smooth procurement process, it is important to have users and providers on the same page with regards to the SPSE application through communication, training, and technical support. 4. The following actions are required during the Job Explanation phase of the job description process, with a focus on the openness principle to promote better comprehension: 5. Providers and committees can benefit from more thorough knowledge of e-procurement methods and procedures in light of 2019's planned adoption of electronic-only procurement (e=procurement). 6. Because that errors frequently arise at this point when submitting bids via electronic documents so that cannot be opened at the time of opening the bid materials, LPSE PUPR can steer the form of technical briefing to bidders regarding the SPSE application. 7. Audio-visual training, which can be downloaded in the app and YouTube, and online consultation through the app are both recommended to boost the quality of the committee's and providers' human resources, presumably at the evaluation stage of bids and qualifications, so as to avoid losing participants and failing the auction. 8. Increasing the capacity of human resources through technical training related to systems and mechanisms for implementing e-procurement of goods/services procurement is essential to the stage of determining and announcing the winner, which is essential to improving the principle of fairness/non-discrimination in determining the winner of the auction.

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