



https://journal.antispublisher.com/index.php/ijmi

## IMPLEMENTATION OF THE E-PROCUREMENT SYSTEM IN THE PROCUREMENT PROCESS OF GOODS AND SERVICES AT PT PERTAMINA INTERNATIONAL SHIPPING (JAKARTA)

Nurlathifah Aurellia Agrippina Sandjaja <sup>1</sup>, Agung Budiatmo, S.Sos., M.M. <sup>2</sup> Diponegoro University

### **Abstract**

Technological developments have changed the way business is done in Indonesia, pushing companies to adapt quickly. Both digital and non-digital technologies play an important role in managing an increasingly connected and competitive business. In the logistics sector, especially in procurement, technology plays an important role in improving efficiency and transparency. The provision of resources through procurement is a key aspect of logistics management, which requires appropriate regulations and policies to ensure effective fulfillment of needs. This procurement process often involves bidding, both with local and international companies, to select qualified and suitable providers. However, the procurement process certainly has some problems such as the non-processing of a document. One of the state-owned companies that has implemented e-procurement is PT Pertamina International Shipping (PIS). This study aims to identify the application of the e-procurement system and inhibiting factors in the application of the e-procurement system in the process of procuring goods and services at PT Pertamina International Shipping (PIS). The research method used by the author is descriptive qualitative. The data used by the author is obtained through interviews with supporting data related to the problems that occur. The results of this study indicate that the implementation of the e-procurement system at PT Pertamina International Shipping (PIS) has not run optimally because there are still inhibiting factors, namely human resources who have not mastered e-procurement, unstable internet and system errors.

**Keywords**: Implementation System, E-Procurement, Procurement of Goods and Services.

Corresponding Author; E-mail: nurlathifahaurelliaas@gmail.com

DOI: https://doi.org/10.61796/ijmi.v1i2.130



### Introduction

The advancement of science and technology in Indonesia has pushed companies to adapt and compete intensively. Technological developments, both digital and non-digital, are essential in an increasingly connected and competitive business world. Technology helps companies in business management, data processing, and decision-making, as well as improving the efficiency and transparency of domestic and international businesses.

In the logistics sector, procurement of goods and services is one of the main functions to fulfill logistics needs. Procurement involves selecting suppliers that have the required quality and excellence, and the importance of policies and regulations governing the evaluation and monitoring of procurement. It involves the purchase and lease of goods or services, usually through auctions with the participation of private companies and state-owned enterprises.

The effectiveness of procurement can be improved by considering factors such as price ceiling, standardization of goods and services specifications, bulk ordering, and the

use of umbrella contracts. However, conventional procurement often faces violations such as non-transparent bidding processes, favoritism, and tenders that are not publicly announced.

One of the innovations in goods and services procurement is e-procurement, which is electronic or online procurement that is expected to reduce violations and increase efficiency. The application of e-procurement is not only in the government environment, but also in SOEs such as PT Pertamina International Shipping (PIS), which uses e-procurement to improve transparency, integrity, and accountability.

Research related to the implementation of e-procurement at PT Pertamina International Shipping emphasizes the importance of maintenance and system development for access to the latest information and a fast document checking process. Based on this phenomenon, a Final Project research was conducted entitled "Implementation of E-Procurement System in the Procurement Process of Goods and Services at PT Pertamina International Shipping (Jakarta)".

#### Methods

Data collection using this qualitative method is supported by facts that occur when conducting research in the field (Abdussamad, 2021). This research was conducted using descriptive qualitative research methods to collect information based on facts that occur in the field at the company PT Pertamina International Shipping. The research locus focuses on where the research was conducted. The research was conducted at PT Pertamina International Shipping (PIS) which is located at Jalan Yos Sudarso Kavling 85 Number 205, RT.10 / RW.11, Sunter Jaya Village, Tanjung Priok District, North Jakarta, DKI Jakarta, Postal Code 14360. In qualitative data collection techniques (Sugiyono, 2018) expresses his opinion that data collection techniques must be carried out in a natural situation without any deliberate setting in order to match the objectives expected by the researcher. The data collection techniques used by researchers are:

## 1. Observation

Observations made can see the real conditions that cannot be revealed by informants. In this study, the authors made direct observations and observations and explored facts related to the procurement of goods and services.

## 2. Interview

Interview is a method of interaction between researchers and informants to obtain information through certain questions and techniques. It involves a conversation in which the researcher asks and the informant answers (Moleong, 2007). Researchers conducted interviews with informants who had been selected.

## 3. Documentation

Documentation is a method used by the author to obtain, study, and process information from relevant documents and research materials, enabling historical tracing and collection of accurate evidence (Burhan, 2008). In this study, the author recorded interviews with informants using a smartphone, recorded the results of interviews, and took photos with informants as well as the author's observation activities.

Data analysis techniques are steps in extracting data that has been obtained from observations, interviews, and documentation, selecting data, and presenting the data that has been obtained (Sugiyono, 2018). The data analysis techniques used by researchers are:

## 1. Data Reduction

Data reduction is an important step in research that aims to simplify information by eliminating irrelevant or unnecessary data, making it easier to analyze and write. The goal is to describe a situation that is focused and allows researchers to collect more relevant and significant data. Electronic tools such as cell phones can be used to assist in the data reduction process by membero codes on certain relevant aspects (Sugiono, 2012).

### 2. Data Presentation

After the data reduction process is complete, the next step is to present the information in the form of a brief description. Usually, qualitative research uses narrative text for this stage. The aim is to explain the problems that arise more easily understood and make the next writing plan more structured and systematic (Sugiono, 2012).

## 4. Conclusion Drawing

In the final stage, the author selects general data based on the categories that have been reduced and combined. The main objective is to reach the final conclusion which is the answer to the main problem in the research. This stage aims to present relevant and important information to make it easier for readers to understand the conclusions produced. Qualitative research can provide answers to the first stage of problem formulation and develop further after field research (Sugiono, 2012).

#### **Result and Discussion**

In accordance with the research conducted by the author through scientific informants from PT Pertamina International Shipping (PIS), the research results regarding the implementation of the e-procurement system in the process of procuring goods and services are as follows:

# Procurement Planning Process for Goods and Services at PT Pertamina International Shipping (PIS)

Based on interviews, here are the steps in the planning of procurement for goods and services from the company's internal perspective:

- 1. Consolidation of Needs Planning: Consolidating all plans for the procurement of goods and services with the Budgeting and related functions, referring to Governance Standards (STK).
- 2. Study of Types of Goods and Services: Studying the types of goods and services to be included in the catalog system based on internal proposals.

- 3. Determination of Centralized Procurement Strategy: Establishing a centralized procurement strategy, including procurement packages, bidding, and contract implementation terms.
- 4. Review of Umbrella Contracts: Reviewing existing umbrella contracts to find providers offering lower prices with equivalent quality.
- 5. Reporting Alternative Providers: Reporting more competitive alternative providers to the procurement function issuer of umbrella contracts.
- 6. Management of Supporting Data: Managing price data and providers of goods and services to support the provider selection process.
- 7. Signing of Integrity Pact: Signing an Integrity Pact as a commitment to an honest and transparent procurement process.

This procurement process aims to ensure that the procurement of goods and services is conducted efficiently, effectively, and in line with the company's needs.

# The Preparation for Procurement of Goods and Services at PT Pertamina International Shipping (PIS)

Based on interviews, the researcher concludes that procurement preparation, similar to procurement planning, relies on Internal Procurement Guidelines No. A10001PIS6200/2023-9 regarding procurement of goods and services from internal parties or the company. Procurement preparation includes:

- 1. Specification Determination (TOR/KAK): This involves defining technical specifications or references (TOR/KAK) encompassing procurement objectives, scope of work, success criteria, and performance requirements to ensure suppliers fully understand expectations. Involvement of stakeholders, including end-users and technical experts, is crucial to encompass all needs.
- 2. Budget Estimate Adjustment (HPS): HPS is the estimated unit price based on market analysis and reliable price references. Market surveys ensure accurate and current pricing data, aligning HPS with budget needs and market prices to prevent unrealistic pricing.
- 3. Contract Plan (Draft Contract/GTC): Clear contract drafts should cover essential aspects like scope of work, pricing, payment terms, and project timeline. Compliance with regulations and legal requirements is essential, along with risk mitigation clauses such as performance guarantees, penalties for delays, and force majeure clauses.
- 4. Work Plan and Terms (RKS): RKS details implementation schedules, technical specifications, and operational terms for suppliers. It specifies performance guarantees, working hours, competitive pricing, work methods, safety procedures, and other relevant conditions to ensure contract compliance.
- 5. Supplier Requirements (Tender Documents): These criteria define qualifications for suppliers to participate in tender processes, including technical capabilities, financial stability, and experience. Clear requirements and transparent procedures promote fair competition among suppliers.

## The Implementation of E-Procurement at PT Pertamina International Shipping (PIS)

- 1. E-Tendering: Conducting procurement electronically where suppliers submit bids online. This method enhances purchasing efficiency and transparency by allowing users to select products from an electronic catalog.
- 2. E-Bidding: Open online bidding to minimize costs by enabling suppliers to offer competitive prices based on company specifications. Real-time monitoring and multiple bids submission enhance transparency and fairness.
- 3. E-Catalogue: An electronic system listing goods and services with specifications and prices from various suppliers. It simplifies procurement, improves transparency, and reduces budget leaks by ensuring prices are below market rates.
- 4. E-Purchasing: Purchasing goods and services from registered suppliers listed in the e-catalogue. This process includes package creation, agreement downloads, and order placements to streamline procurement and enhance transparency.

## The Factors Hindering of E-Procurement at PT Pertamina International Shipping (PIS)

- 1. Lack of Skills and Knowledge: Users' insufficient proficiency in e-procurement systems necessitates intensive and ongoing training, consuming significant time and resources.
- 2. Job Changes and Transfers: Staff turnover and job transfers require retraining for new employees to operate the system effectively, potentially disrupting procurement processes
- 3. .Unstable Internet Signal: Unstable internet signals often lead to sluggish performance and usability issues with the e-procurement system. This can significantly slow down procurement processes and increase the risk of errors.
- 4. Limited Internet Network Capacity: Limited internet network capacity, especially during peak usage times, can cause system errors and delays in workflow. This limitation may frustrate employees and discourage them from using the system effectively.
- 5. Dependency on Centralized Network: Disruptions in the centralized network directly impact the e-procurement system at PT Pertamina International Shipping (PIS), halting workflow processes. This can result in significant financial and operational losses.

# Flowchart of the e-procurement process at PT Pertamina International Shipping (PIS)

1. Submit Supporting Documents: FPP initiates procurement by submitting supporting documents like Request for Proposal (RFP), technical specifications, and budget information. Procurement reviews these documents for completeness and compliance with company policies.

- 2. Pre-Tender Meeting: A meeting is held to discuss project requirements and clarify any questions from potential vendors, ensuring a clear understanding and competitive bids.
- 3. Invitation or Announcement of Provider Selection: After the meeting, selected vendors are invited via PT Pertamina International Shipping's e-procurement website or email.
- 4. System Maintenance in E-Procurement: Operational teams maintain the e-procurement system to minimize errors and ensure documents can be released and published smoothly.
- 5. Submission of Bids: Vendors submit their bids to procurement before the deadline, evaluated based on price, technical qualifications, and past performance.
- 6. Network Monitoring and Decision Making: Ensures smooth evaluation and bid opening without system errors, maximizing process efficiency.
- 7. Opening and Evaluation of Bids: Procurement opens bids and evaluates them according to predefined criteria, possibly using a scoring system or detailed review.
- 8. Negotiation and Clarification: Procurement negotiates terms with the selected vendor, discussing pricing, delivery terms, and other contract details.
- 9. Reporting of Selection Results: Results are reported to relevant stakeholders for analysis and approval, including procurement managers, finance, and purchasing functions.
- 10. Approval of Announcement Results: Stakeholders approve the tender winner based on the finalized report.
- 11. Announcement of Winner: The winner is publicly announced through email and the e-procurement website for transparency.
- 12. Announcement of Winner: Procurement announces the selected vendor, informing them of their win and providing contract terms and conditions.
- 13. Appeal Period: Vendors have a specified time to appeal if they believe the procurement process was unfair or not in accordance with company policies.
- 14. Monitoring and Final System Checks: Ensures no disruptions or errors during document issuance or release.
- 15. Determination of Winner: Procurement formally determines the winning vendor and issues a notice of contract award detailing the contract specifics and effective date.
- 16. PO/Contract Issuance & Amendment: Procurement issues a Purchase Order (PO) or contract to the selected vendor, outlining agreed-upon procurement terms. Amendments may be made if necessary, requiring mutual agreement

### Conclusion

1. PT Pertamina International Shipping (PIS) uses the GEP SMART e-procurement system to facilitate the procurement of goods and services with efficiency, transparency, and speed. However, its implementation has not been optimized. The e-tendering, e-bidding, e-catalog, and e-purchasing methods are still

- constrained by unstable internet connections, system errors, and lack of mastery by human resources.
- 2. The lack of e-procurement optimization in PIS is caused by a lack of understanding of the system, unstable internet signals, and system errors. This led to document release failures, harming both the procuring and receiving companies. Updates to the e-procurement process flow are needed to reduce these failures.

### References

- [1].M. H. Alfiandri and F. Yuliani, "Penerapan E-Procurement dalam Proses Pengadaan Barang/Jasa," Jurnal Sumber Daya Manusia Unggul (JSDMU), vol. 1, no. 2, pp. 74-81, 2021. [Online]. Available: https://jsdmu.ejournal.unri.ac.id
- [2]. Damayunita, "Analisis Implementasi Pengadaan Barang dan Jasa Secara Elektronik (E-Procurement) di Lembaga Pemerintah Kota Palangkaraya," J-MAS (Jurnal Manajemen dan Sains), vol. 7, no. 2, pp. 1004-1007, 2022.
- [3].N. M. R. Febrianti, "Penerapan Prinsip-Prinsip Pengadaan Barang dan Jasa dalam Sistem E-Procurement di Kabupaten Sleman," Doctoral Dissertation, Universitas Atma Jaya Yogyakarta, Yogyakarta, Indonesia, 2022.
- [4].PT Pertamina Hulu Energi, "Panduan Pengadaan Barang/Jasa untuk Eksternal," Jakarta: Subholding Upstream, 2021.
- [5].N. Suardhita, A. Rahman, and R. Martiwi, "Implementasi Sistem E-Procurement di PT Taman Impian Jaya Ancol Unit Sea World Ancol Jakarta Utara," LITERATUS, vol. 4, no. 2, pp. 1-10, 2022.
- [6].G. S. Utama and A. E. Prabiyanto, "E-Procurement System Pengadaan Barang dan Jasa pada PT. Trakindo Utama Surabaya," Jurnal Riset Akuntansi dan Bisnis Airlangga, vol. 4, no. 1, pp. 592-606, 2019.