

Implementation SPSE V4.5 in Electronic Procurement System (LPSE) as Decision Making for Tender

Citra Amalia, Afiza Ismail

College of Computing, Informatics and Mathematics, Universiti Teknologi MARA

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.9010379>

Received: 15 January 2025; Accepted: 24 January 2025; Published: 23 February 2025

ABSTRACT

Electronic Procurement Service (LPSE) is an information technology management service to facilitate the implementation of Goods/Services Procurement electronically. In every Goods/Services Procurement Service Unit within the Ministry/Agency/Regional Device, the LPSE facility is used to carry out the procurement of goods/services electronically. The system currently used in LPSE is the Electronic Procurement System Application (SPSE), an e-Procurement application developed by the Directorate of Electronic Procurement Systems. Currently, the version in use is the latest one, SPSE V4.5, which was released on October 20, 2024. Due to the new system, many adjustments are required for its users, namely the government and companies involved in tenders. This application has also been adjusted to comply with Presidential Regulation No. 12 of 2021 concerning the Procurement of Government Goods/Services, as well as its derivatives. This study examines the impact of LPSE on the procurement process of goods/services, focusing on efficiency, transparency, and accountability. This research evaluates the integration of LPSE, highlighting its advantages and challenges, and suggesting potential improvements for optimal utilization. Through comprehensive analysis, the research evaluates the integration of SPSE V4.5 in streamlining procurement workflows among stakeholders. This research contributes to the broader discussion on digital transformation in procurement, emphasizing the need for organizations to adapt and leverage technology to enhance overall procurement effectiveness using qualitative research methods and descriptive techniques, this study analyzes the implementation of e-procurement on LPSE with the SPSE V4.5 system. Electronic Procurement of Goods/Services aims to enhance transparency, accountability, market access, fair business competition, procurement efficiency, monitoring, auditing, and real-time information access for clean and good government procurement. This system is expected to follow LPSE principles and reduce corruption, collusion, and nepotism, ensuring the convenience of procurement in the SPSE V4.5 system.

Keywords: LPSE, SPSE, LKPP, Tender, Procurement.

INTRODUCTION

In a country, regulations are needed to govern the tender system within it, as is the case in Indonesia. Indonesia has a Tender Service, namely the Electronic Procurement Service (LPSE). The LPSE Service is a unit that facilitates the procurement of goods/services conducted electronically. Initially, it was an e-procurement system developed by the Government Goods/Services Procurement Policy Agency (LKPP). The LPSE system was developed on a free license basis to be implemented across all government agencies in Indonesia. (LPSE, 2024) The Government of the Republic of Indonesia has established LPSE in each province in Indonesia to provide electronic procurement services for government offices. (Adi, 2017)

The government established the Government Procurement Policy Agency (LKPP) tasked with formulating regulations in the field of goods and services procurement and forming an Electronic Procurement Service (LPSE). LKPP provides space for Ministries/Agencies/Regional Device Work Units/Institutions to establish Electronic Goods and Services Procurement Services (LPSE) using the Electronic Procurement System (SPSE) that refers to LKPP. (Adi, 2017). The SPSE currently in use is the latest version, SPSE V4.5, which was released in October 2024.

The purpose of this writing is to analyze the implementation of the new SPSE V4.5 system, specifically to understand the practices of procurement of goods and services through LPSE with the SPSE V4.5 system and to determine the level of efficiency and effectiveness of procurement of goods and services through the LPSE SPSE V4.5 system. The author hopes that the results obtained from this research can provide input and suggestions for the general management of LPSE. The author also hopes that this research can provide input for the improvement of LPSE services and the enhancement of the quality of goods and services procurement in Indonesia.

LITERATURE REVIEW

LPSE

The Electronic Procurement Service (LPSE) is one of the entities that delivers procurement services using an electronic system. This unit was created and is controlled by both the Ministry of State-Owned Enterprises (BUMN) and the local government. The goal of establishing and managing this LPSE is to give ULP or officials with facilities that will make it easier to acquire products or services from the government, bundled with an electronic system. The necessity to construct LPSE, in addition to supporting the government in the purchase of goods or services, also aids in the process of electronic procurement of products or services from other places with internet access. LPSE is required to follow the standards indicated in articles 15, 16, and 109 paragraph 7 of Law Number 11 of 2008 regulating ITE, with LKPP providing assistance and monitoring during implementation.(Angreini & Rusdianto, 2024). The legal basis for the establishment of LPSE is Presidential Regulation Number 16 of 2018 concerning Government Procurement of Goods/Services Article 73, the technical operational provisions of which are regulated by Institutional Regulation Number 10 of 2021 concerning the Procurement Unit for Goods/Services. LPSE, in organizing the electronic procurement service system, is also required to meet the requirements as stipulated in Law Number 11 of 2008 concerning Electronic Information and Transactions. (LPSE, 2024)

The LPSE aims to enhance transparency, accountability, market access, efficiency, monitoring, auditing, and real-time information access for a clean and good government procurement of government goods/services. The application includes modules such as Tender/Selection/Quick Tender, Non-Tender (Direct Appointment and Direct Procurement), Non-Tender Recording, Self-Management Recording, Emergency Procurement Recording, e-Audit, and Contract Management. The application is developed with national efficiency in mind, requiring no licensing fees for the application or its supporting software. The application was developed in collaboration with the National Cyber and Crypto Agency (BSSN) for document encryption/decryption functions and the Financial and Development Supervisory Agency (BPKP) for the audit subsystem.(LPSE, 2024) (Pangaribuan et al., 2022).

SPSE V4.5

The e-tendering process is entirely conducted online or via the internet. Starting from the procurement committee making announcements via the internet on the LPSE site using the SPSE application. At the announcement stage, the committee prepares the auction documents containing the requirements for the auction participants. At the registration stage, auction participants must refer to the auction documents established by the committee. Participants can submit questions online without face-to-face interaction through the SPSE application. These questions are then directly answered by the Working Group (Pokja) of the Procurement Service Unit (ULP) or the Procurement Committee. (Sholeh & Lestari, 2024). The next stage is the submission of bids by the auction participants. The bid documents are submitted in the form of files uploaded through the SPSE application. The bid proposal submitted by the auction participants electronically does not require a wet signature and stamp. The Offer Letter is signed electronically by the head/director of the company or an authorized representative designated by a power of attorney. After the submission period for the offer documents ends, it will be followed by the offer opening stage. (Sumaya. Pupu Sriwulan, 2024). The Committee uses the Document Security Application (APENDO) to download and describe bid files during the bid opening stage. The bid price and arithmetic correction are entered into the SPSE application. The committee or ULP working group evaluates the bid, qualifications, and supporting documents. The PPK determines the winner, and the auction winner is announced online. The SPSE application sends notifications

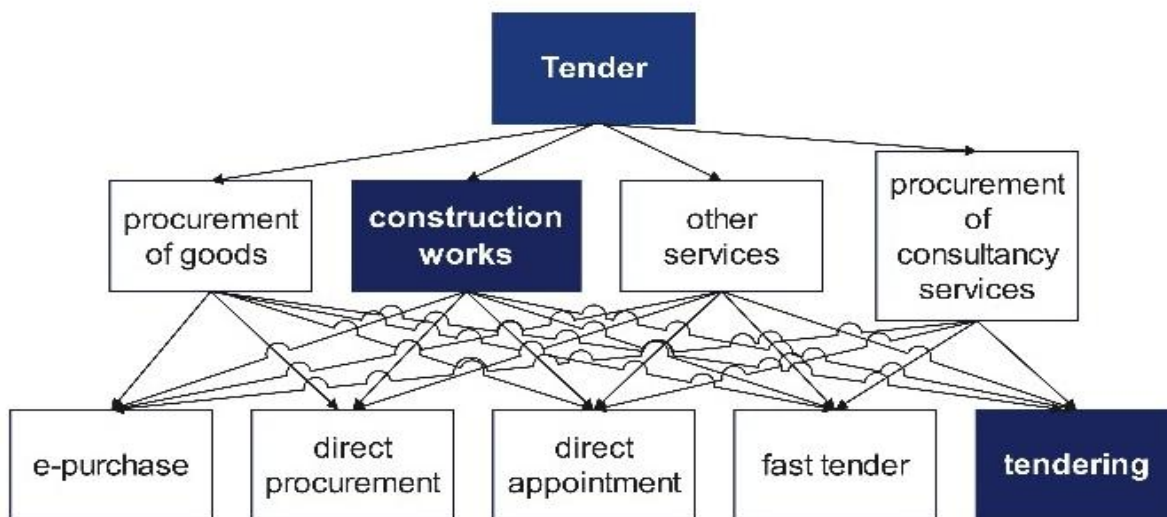
to auction winners. Implementing e-procurement improves the government's procurement system, enhancing transparency, accountability, openness, healthy competition, and fairness. (Sumaya. Pupu Sriwulan, 2024)

Tender

The Electronic Procurement System Application (LPSE) is an e-Procurement application developed by the Directorate of Digital Procurement Systems (LKPP) to facilitate electronic procurement for Ministries/Agencies/Regional Devices (K/L/PD) without an LPSE facility.

Tender is a selection method to obtain Provider of Goods/Construction Works/Other Services. (PRABOWO, 2018). Based on the Government Procurement Policy Agency of the Republic of Indonesia, there are four types of tender projects in Indonesia: procurement of goods, construction works, other services, and procurement of consultancy services. As for the method of tendering in Indonesia, there are 5 types: e-purchase, direct procurement, direct appointment, fast tender, and tendering. (ppe, 2019).

Fig. 1 Type of Tender in Indonesia



Source: Author 2025

METHODOLOGY

The type of research uses descriptive qualitative methods with an analytical approach. Qualitative research is based on a holistic natural background, positioning humans as research tools, conducting data analysis inductively, and prioritizing the process over the research results, which are agreed upon by the researcher and the research subjects. To obtain good, accurate, and relevant data for the research needs, the author used several data collection tools, namely interviews, observations, and document reviews. The data obtained in this research is classified into two types: primary data and secondary data. Primary data is data obtained from the first source in the field or data obtained directly from informants and through direct observation. Secondary data is a source of data obtained indirectly through intermediary media. These two data sources are expected to complement each other and support the validity of the data in this research. The interview method in this research is presented in a structured interview format, using an interview guide that the researcher has prepared. The researcher conducts interviews by establishing direct communication with informants, namely individuals who are considered to have the most knowledge about matters related to the sources and objects of the research, and who can be trusted to provide data and information pertinent to the study. The informants in this research include the head of the Goods and Services Procurement Division of Central Kalimantan Province, procurement officials, POKJA, and users of procurement services. Research questions are a formulation of questions that will be answered through the collection of information data and analysis that will be used to address the focus of the research problem, so that the expected results can be obtained in accordance

with the research objectives.

Document review examines data collection techniques in the form of literature books, documents, regulations, and other media related to the research focus. The document review in this research is conducted by collecting data obtained through the examination of books, data/documents, Presidential Regulation No. 12 of 2021, LKPP Regulation No. 12 of 2021, and the USER Guide SPSE V4.5, among others, related to the implementation of electronic goods/services procurement (SPSE PPK and UKPBJ applications) in the procurement service unit of the Central Kalimantan Provincial Bureau of Goods and Services Procurement. The documents in question include monitoring the implementation of goods/services procurement in 2022, documents for selecting tender package providers, and data archives in the SPSE application. In the process of data processing, the data obtained during the research will be selected according to the type and source obtained either through interviews or document review based on the focus of the problem or phenomenon being studied. The information collected through interviews with key informants will then be processed concisely and systematically, and simplified in the form of interview transcripts. Meanwhile, the data from the document review will be clarified according to the unit of symptoms or based on the indicators being studied from each perspective. (UKPBJ, 2024)

RESULT

The Procurement Working Group (pokja) is a team appointed by the budget user/authorized budget user. to conduct the selection of goods/services business actors (Presidential Regulation Number 12 of 2021 Article 1 Number

12). In SPSE, the working group has the following authority: Completing the tender package that has already been prepared by the PPK; Preparing tender specifications; Create the e-SDP and announce it; Conducting a tender explanation (anwijzing); Uploading the tender addendum document (if there is a tender document addendum); Downloading and opening the bid documents; Conducting a tender evaluation; Printing the minutes of the bid evaluation and tender results; Determining the tender winner; Announcing the tender winner; and Responding to objections.

Flow of Tender Process in SPSE Application version V4.5 will be explained in this chapter. Divided into Post-Qualification Tender Process Flow 1 File that is preparation and qualification. Pre-Qualification Tender Process Flow 2 File that is submission of bids and evaluation; Pre Qualification Method; Tender Process Flow Stage 2 that is the pre-qualification stage and the bidding stage. There has been less research done in research discussing the criteria and sub-criteria in the latest version of LPSE SPSE V4.5 (KRISDIYANTO & Kurnianingsih, 2023).

The Selection Committee determines the Method of Submission of Bid Documents based on the kind of procurement for Construction Works/Construction Consultancy Services, the method of selecting Providers, the method of assessing bids, and the scope/complexity of the job. The Method of Bid Document Submission acts as a guide for the Selection Committee when creating the selection schedule and for the Selection Participants when submitting bid materials. The method for submitting bid documents in the selection of Construction Work Providers/Construction Consultancy Services can be carried out using: a. The One File Method is utilized for: 1) Construction Work Tenders using the Lowest Price Evaluation Method; 2) Quick Tenders; 3) Direct Procurement; and 4) Direct Appointment. c. The Two File Method is applied.

Methods of selecting goods and services providers and submitting bidding documents include: pre-qualification tenders with two files; post-qualification tenders with one file; and post-qualification public tenders with two files. The post-qualification 1 file method is a qualification assessment carried out simultaneously with the implementation of bid evaluations covering administrative, technical, and price aspects submitted in 1 file. (Wulan, 2022) . Post-qualification is a qualification assessment process after bid submission. Post-qualification is carried out for procurement as follows: (1) through public auction, except for complex works; or (2) for those using simple auction. The explanation of the post-qualification stage is actually the same as the explanation of the pre-qualification stage. It's just that the order of the stages is slightly different. If explained further, the explanation is as follows: (expert, 2021) (LKPP, 2021) As in the flowchart presented below:

Post-Qualification Tender Process Flow 1 File Method is a qualification assessment process carried out after the submission of bidding documents. The stages of the selection process between prequalification and postqualification are almost the same, except that in prequalification the provider assessment is carried out before the bid is submitted while for postqualification it is carried out together with the bid evaluation process.

Fig. 2 Post-Qualification Tender Process Flow 1 File (1)

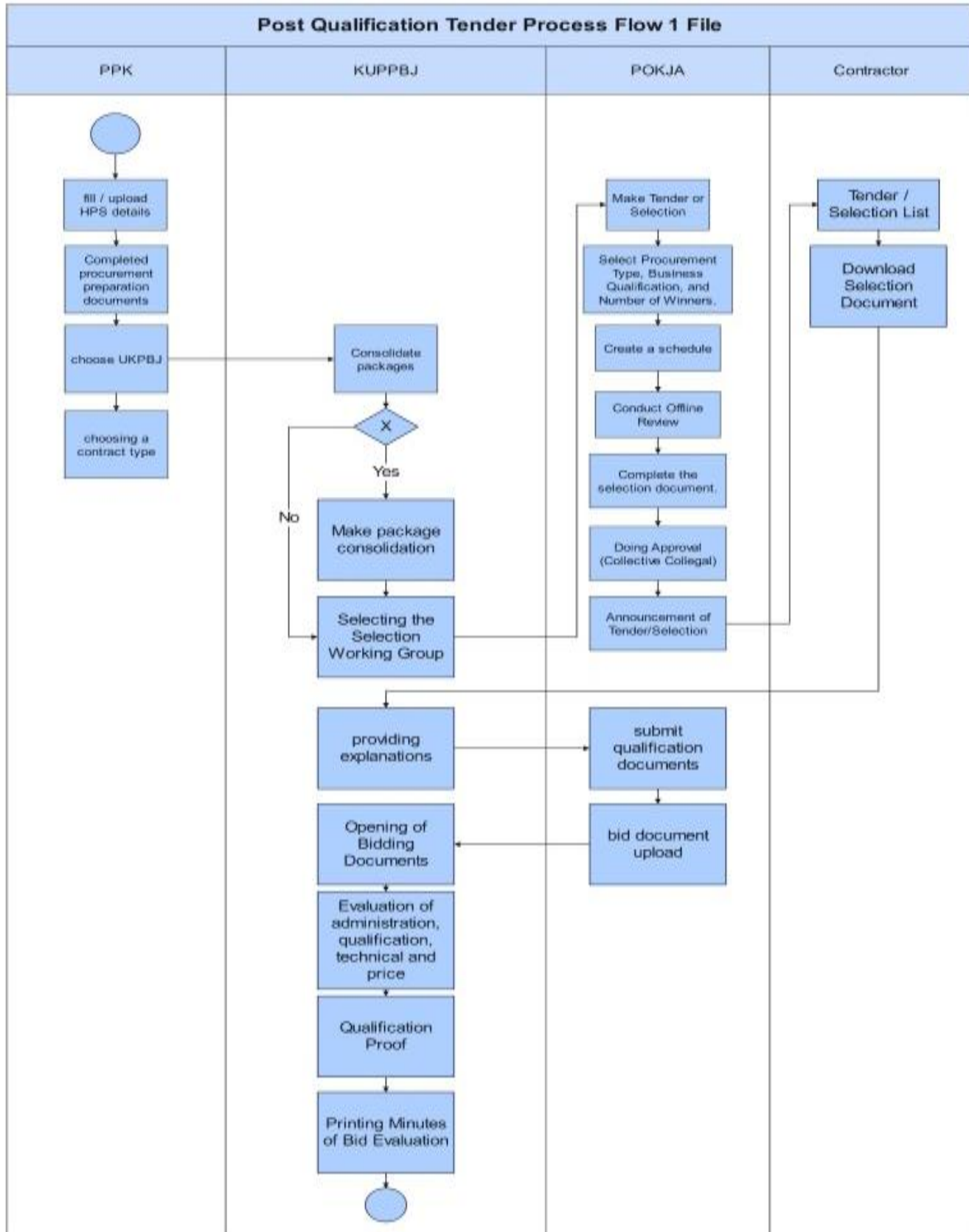
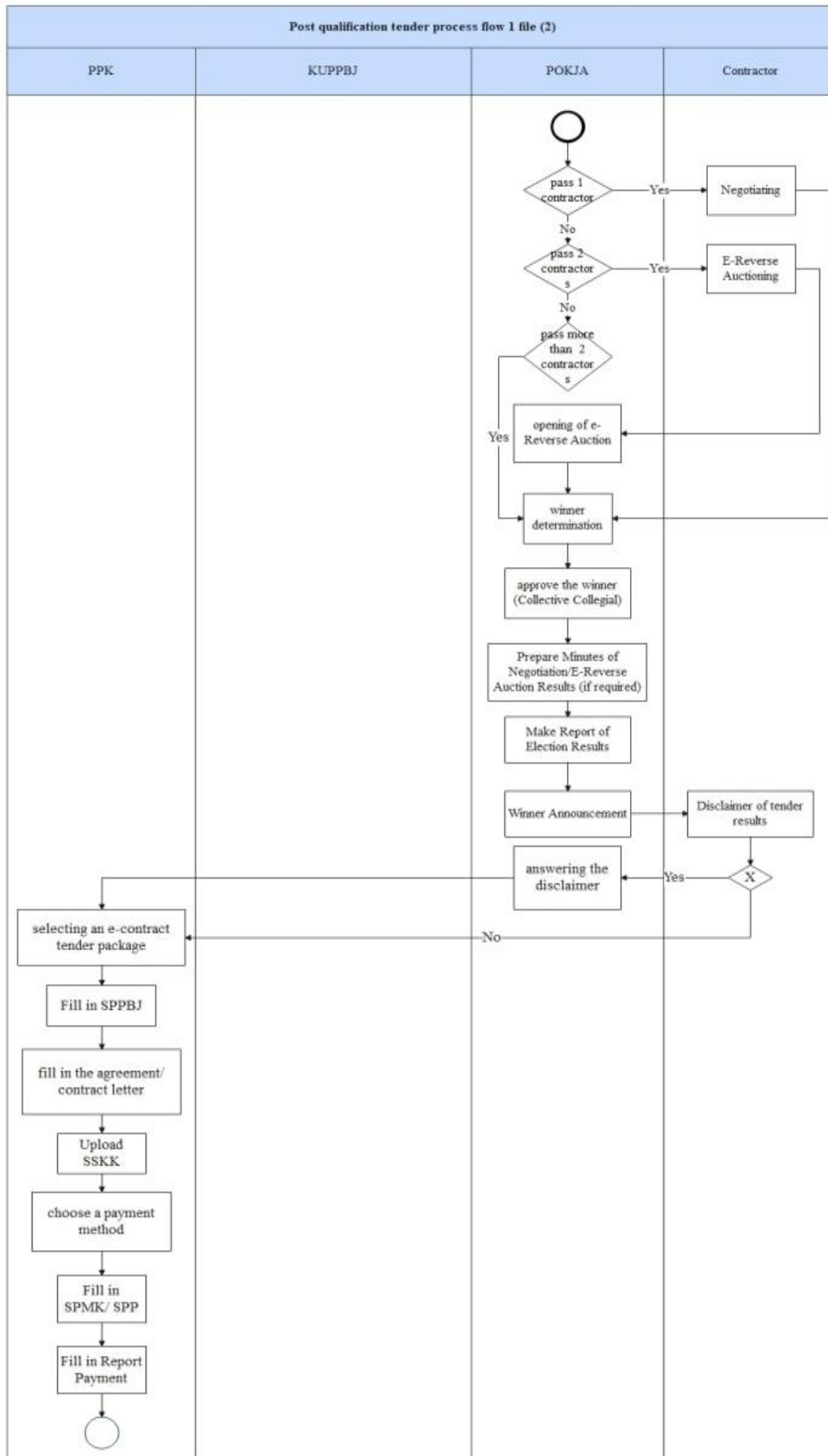


Fig..1 Post qualification tender process flow 1 file (2)



Source: SPSE V4.5

Prequalification is a qualification assessment process conducted prior to bid submission that results in a list of prospective providers. Prequalification is carried out for the selection of providers as follows: (1) Complex work through public auctions; (2) Those using Limited Tender; or (3) Those using direct appointment, except for emergency handling.

The explanation of the prequalification stages as mentioned in the table above, if explained further, is as follows:

Fig..2 Pre-Qualification Tender Process Flow 2 File (1)

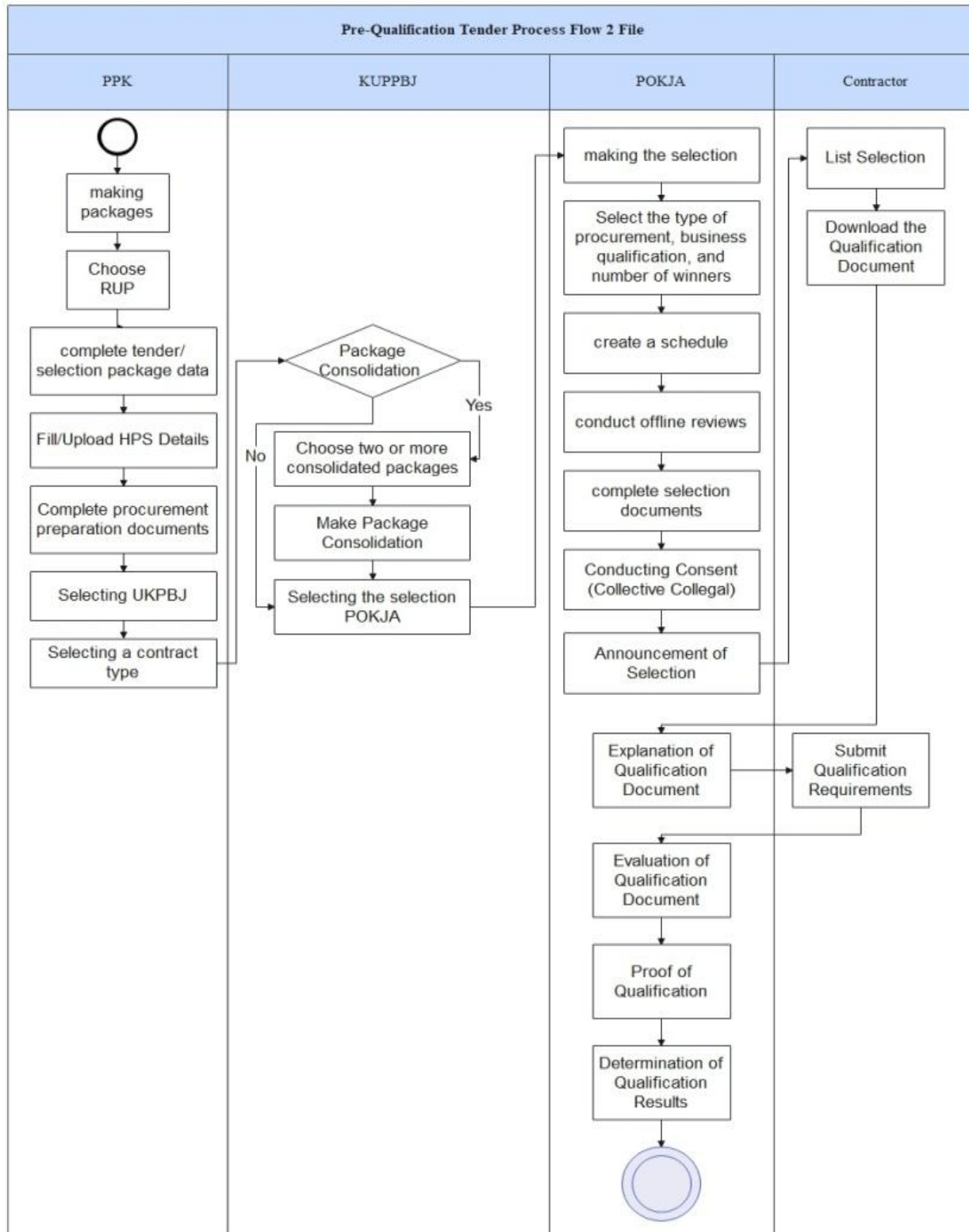
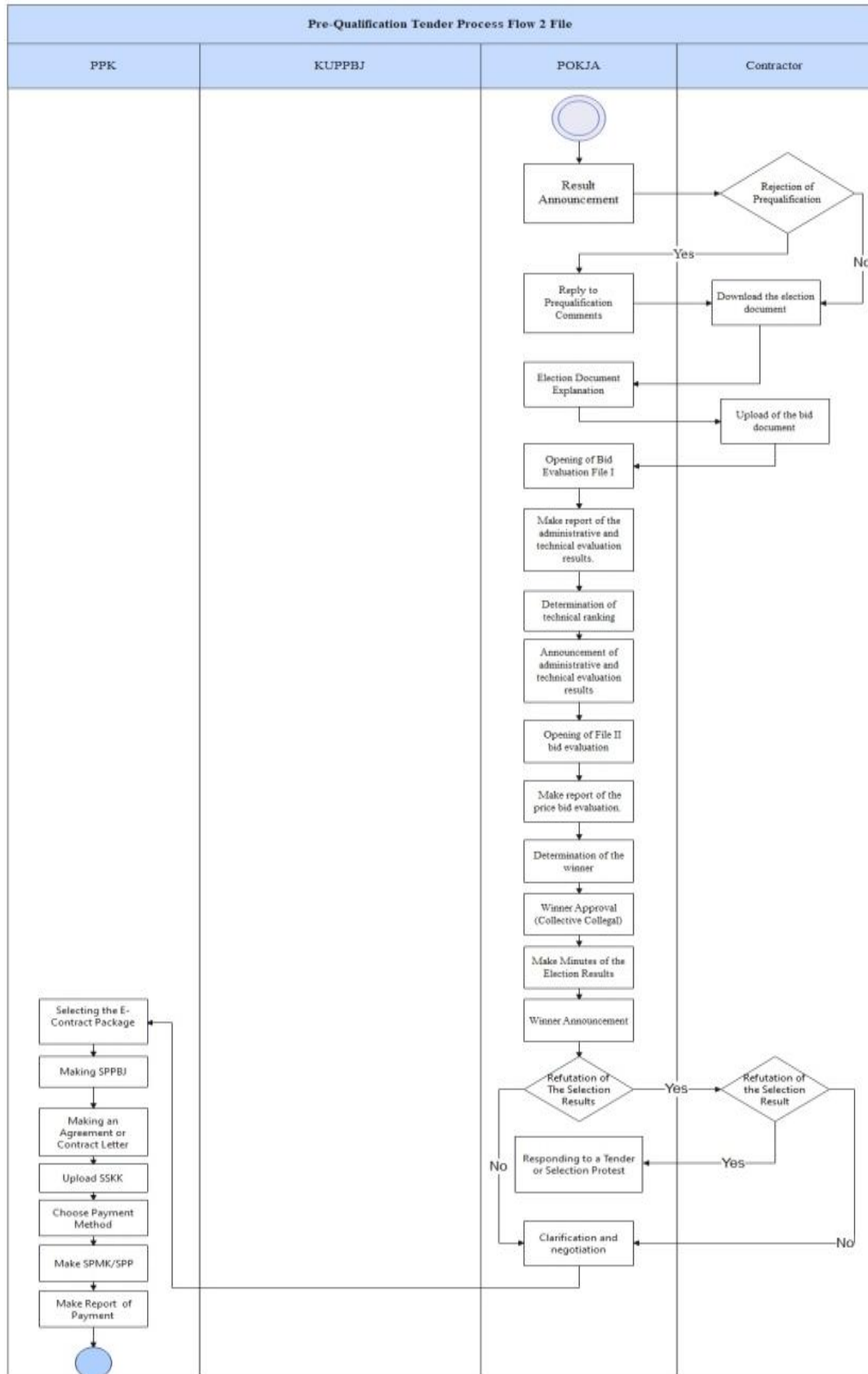


Fig. 3 Pre-Qualification Tender Process Flow 2 File (2)



Prequalification is part of the tender documents included that reflect the contractor's ability from an engineering and financial aspect on previous projects.

Fig. 4 Tender Process Flow of the 2-Stage Pre-Qualification Method (1)

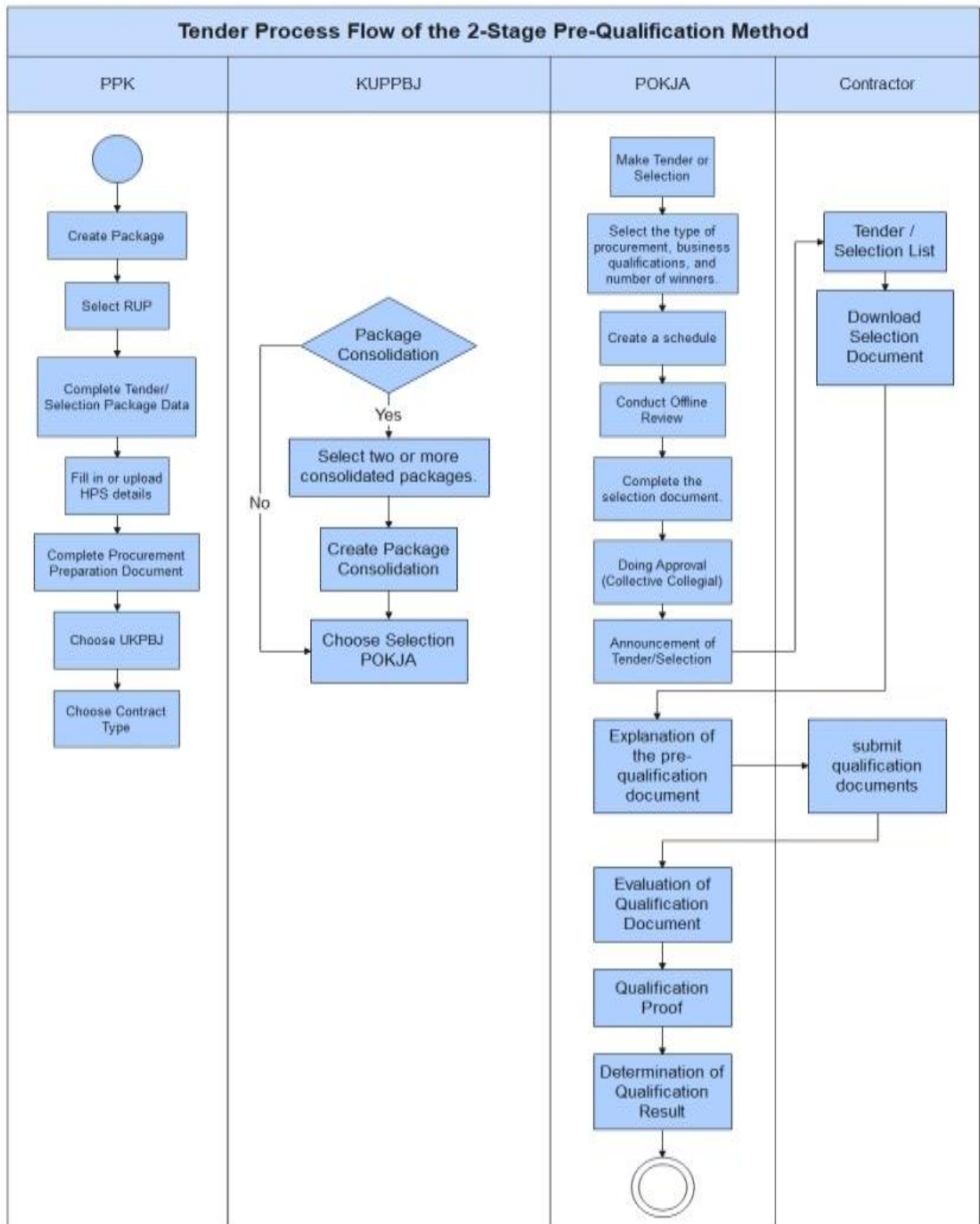
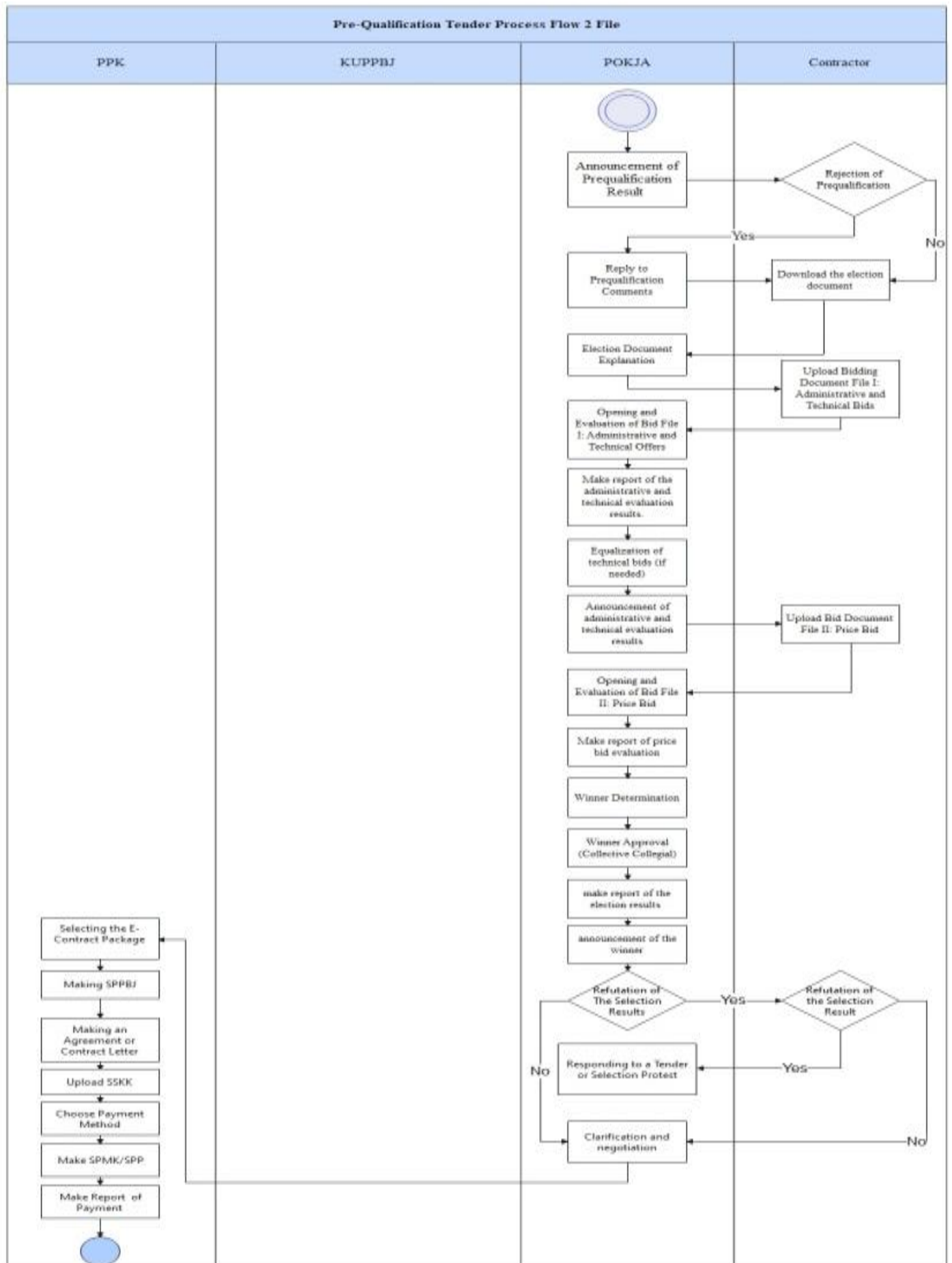


Fig. 5 Tender Process Flow of the 2-Stage Pre-Qualification Method (2)



The 2-stage pre-qualification tender method is a tender process that involves two separate stages. Stage 1 involves establishing pre-qualification requirements, announcing the tender, registering and submitting documents, and undergoing a pre-qualification evaluation. The evaluation team assesses the documents submitted and determines if they meet the requirements. Parties that meet the requirements are invited to participate in the next stage. The results of the pre-qualification process are announced to all interested parties, and pre-qualified parties are invited to submit their bids in the second stage.

The second stage of the bidding process involves providing detailed information on tender requirements to pre-qualified parties, submitting their bids in the form of technical, commercial, and pricing proposals. The evaluation team assesses the bids based on pre-defined criteria, including technical aspects, price, and compliance with tender requirements. If necessary, negotiations are conducted with the proposed winner to clarify contract terms or pricing. After successful evaluation and negotiations, the winning bidder is announced and invited to start the contracting process.

The 2-stage pre-qualification tender method allows bidders to compete in a more focused stage after first ensuring that they meet the initial qualifications. This can improve efficiency and quality in the procurement process.

Generally, for the tender stages, it starts with the Prequalification Announcement, which is the tender announcement displayed on the LPSE website by the POKJA, where participants or contractors download the Qualification Document. Explanation of the Prequalification Document, which includes the documents and requirements that the contractor company must possess in order to participate in this tender selection. Next, the contractor will register for the tender through the website page and submit the first draft of the requirements, which is the Submit Qualification Requirements. Next, the POKJA will evaluate the Qualification Documents submitted by the contractor regarding the requirements needed to participate in the tender. Next, the POKJA will conduct an initial examination of the documents submitted by the contractor, referred to as Qualification Evidence. Then, the POKJA will decide which documents and requirements are definitely needed for this tender, namely the determination of qualification results, and the POKJA will announce the pre-qualification results on the LPSE website. There is a Prequalification Objection Period provided if the contractor feels that the requirements given are burdensome or confusing with the stipulations. If there are no objections, the contractor can download the selection documents, and then the POKJA will explain to the contractor to come to the LPSE office to clarify the contents of the documents. Next, the contractor prepares the bid documents as well as possible to then upload the bid documents to the LPSE website as a user (contractor who registers and is registered), and the next task of the POKJA is the opening and evaluation of the Bid. File I: Administration and Technical, which includes the verification of document authenticity and the presence of the contractor's team at the LPSE office, Announcement of the Results of the Administration and Technical Evaluation. Opening and Evaluation of Bids File II: Price, Winner Determination, and Winner Announcement, the results of which will be announced on the LPSE website complete with their values, is given an Objection Period if the contractor feels something is amiss but must be proven with strong evidence so that the tender can be repeated. However, if there are none, it will proceed to the next stage, which is clarification and negotiation of technical and cost aspects, and the issuance of the Letter of Appointment of Goods and Services Provider as well as the signing of the contract between the organizer and the contractor.

CONCLUSION

The implementation of electronic procurement of goods and services through SPSE V4.5 on LPSE has a positive impact on the procurement process of goods and services. The implementation of electronic auctions encourages the achievement of procurement goals and supports the principles of procurement. The implementation of electronic auctions using SPSE V4.5 provides ease for users in the technical execution of auctions both systematically and technically, such as the administration of bid documents. The implementation of electronic auctions brings economic benefits in the form of increased efficiency in auction execution, which has a positive impact on the management of state finances. The implementation of e-procurement at LPSE faces internal and external challenges. The internal constraint is the lack of human resources owned by LPSE. The external challenges faced include data corruption during the upload to the SPSE V4.5 system caused by the network owned by the provider and the auction committee.

ACKNOWLEDGMENT

I would like to thank the College of Computing, Informatics, and Mathematics at Universiti Teknologi MARA for all the assistance provided in this research

REFERENCES

1. Aronoff, S., (1989). Geographic Information Systems: A Management Perspective. Ottawa: WDL Publications.
2. Adi, C. W. (2017). ANALISIS PENERAPAN E-PROCUREMENT MENGGUNAKAN SISTEM PENGADAAN SECARA ELEKTRONIK: STUDI KASUS PADA LAYANAN PENGADAAN SECARA ELEKTRONIK (LPSE) KEMENTERIAN KEUANGAN PAPUA BARAT. *Jurnal Perbendaharaan, Keuangan Negara Dan Kebijakan Publik*, 2(2), 1–16.
3. Angreini, M. A., & Rusdianto, R. Y. (2024). Implementasi Penggunaan Layanan Pengadaan Secara Elektronik (LPSE) Terhadap Proses Pengadaan Barang Dan Jasa Di PT Xyz. *Jurnal Riset Dan Inovasi Manajemen*, 2(1), 186–195. <https://doi.org/10.59581/jrim-widyakarya.v2i1.2602>
4. expert, hukum. (2021, March 20). PRAKUALIFIKASI DAN PASCAKUALIFIKASI PENGADAAN BARANG DAN JASA. *Hukum Expert*. <https://hukumexpert.com/prakualifikasi-dan-pascakualifikasi-pengadaan-barang-dan-jasa/?detail=ulasan>
5. KRISDIYANTO, C. , E. E. , & Kurnianingsih, F. (2023). EFEKTIVITAS WEBSITE LAYANAN PENGADAAN SECARA ELEKTRONIK SEBAGAI MEDIA INFORMASI DALAM KONTEKS RELASI GOVERNMENT TO BUSINESS (Studi Kasus Pada Bagian Pengadaan Barang/Jasa Sekretariat Daerah Kota Tanjungpinang) [Doctoral dissertation, Universitas Maritim Raja Ali Haji]. https://scholar.google.com/scholar?as_ylo=2023&q=spse+v4.5&hl=id&as_sdt=0,5
6. LKPP, J. (2021, June 10). Peraturan Lembaga Nomor 12 Tahun 2021. *JDIH LKPP*. <https://jdih.lkpp.go.id/regulation/peraturan-lkpp/peraturan-lkpp-nomor-12-tahun-2021>
7. LPSE. (2024). Tentang Kami LPSE. LPSE. <https://lpse.kalteng.go.id/eproc4/publik/tentangkami>
8. Pangaribuan, J., Safuan, & Musa. (2022). PENERAPAN LPSE (LAYANAN PENGADAAN SECARA ELEKTRONIK) UNTUK KEMUDAHAN KEGIATAN PENGADAAN BARANG DAN JASA. *Syntax Literate: Jurnal Ilmiah Indonesia*, 7(2).
9. ppe. (2019, January 18). Metode Pemilihan Penyedia Barang/ Pekerjaan Konstruksi/Jasa Lainnya dalam Perpres No. 16 Tahun 2018. LPSE . <https://lpsekabinhil.id/metode-pemilihan-penyedia-barang-pekerjaan-konstruksi-jasa-lainnya-dalam-perpres-no-16-tahun-2018/>
10. PRABOWO, A. (2018). PERATURAN LEMBAGA KEBIJAKAN PENGADAAN BARANG/JASA PEMERINTAH NOMOR 10 TAHUN 2018 TENTANG PEDOMAN PELAKSANAAN TENDER/SELEKSI INTERNASIONAL. *JDIH LKPP*. <https://www.bing.com/ck/a?!&p=e7cbd6bc1cd3880fJmltdHM9MTcwNDMyNjQwMCZpZ3VpZD0yZjk2OWRmYy1jYTEyLTYxZjMtMThlMi04ZTc2Y2UxMjY3MTMmaW5zaWQ9NTQxOA&ptn=3&ver=2&hsh=3&fclid=2f969dfc-ca12-61f3-18e2-8e76ce126713&psq=ada+berapa+jenis+tender+di+Indonesia&u=a1aHR0cHM6Ly9qZGloLmxrcHAuZ28uaWQvcmVndWxhdGlubi9kb3dubG9hZC9wZXJhdHVyYW4tbGtwcC1ub21vci0xMC10YWWh1bi0yMDE4LzE&ntb=1>
11. Sholeh, M. , W. K. , & Lestari, R. I. (2024). Penerapan good governance pada pelaksanaan pengadaan barang dan jasa secara elektronik (e-procurement) di lingkungan pemerintah provinsi jawa tengah. *Jurnal Riset Ekonomi Dan Bisnis*, 16(3), 266. <https://doi.org/https://doi.org/10.26623/jreb.v16i3.6844>
12. Sumaya. Pupu Sriwulan. (2024). Analisis Pelaksanaan Pengadaan Barang/Jasa Melalui Elektronik Pada Pemerintahan Kabupaten Banyumas. *MANIFESTO: Jurnal Gagasan Komunikasi, Politik, Dan Budaya*, 2`2), 10–16. <https://journal.awatarapublisher.com/index.php/manifesto>
13. UKPBJ. (2024). Tugas Pokok dan Fungsi Biro Pengadaan Barang dan Jasa Sekretariat Daerah Provinsi Kalimantan Tengah. *BIRO PBJ KALTENG*. <https://biropbj.kalteng.go.id/dokumen/detail/tugas-pokok-dan-fungsi-biro-pengadaan-barang-dan-jasa-sekretariat-daerah-provinsi-kalimantan-tengah>
14. Wulan, F. M. (2022). E-Book Panduan Penyusunan Dokumen Penawaran.