INTRODUCTION

The Public Works Department of Uttarakhand, hereafter referred to as PWD, boasts a rich and illustrious history in shaping the state's development. This department plays a pivotal role in the construction and maintenance of vital infrastructure, including roads, bridges, and buildings.

As the pioneering engineering department in the state, PWD has established an intricate and efficient network that facilitates the successful completion of a diverse range of projects throughout Uttarakhand. Over the years, the PWD has been instrumental in the construction and maintenance of vital infrastructure, including an extensive network of roads, bridges, and public buildings. These projects have not only contributed to the state's development but have also played a significant role in improving the lives of its residents, enhancing connectivity, and fostering economic growth. At the helm of PWD is the Engineer-in-Chief, overseeing various zonal offices. Each zonal office is headed by a Zonal Chief Engineer, who, in turn, manages several circles. Each circle is under the supervision of a Superintending Engineer (SE), and within these circles, divisions are responsible for executing specific projects and tasks. This hierarchical structure ensures effective project management and implementation across the state.

For a more detailed understanding of the PWD's organizational structure, you can refer to the official chart available at https://mis.pwduk.in/hrms/orgChart.

Certainly, the bidding process for the procurement of civil construction works is a fundamental and crucial activity in the field of construction and infrastructure development.

To enhance the bidding process, improve transparency, transition to a paperless system, and reduce evaluation time, this Request for Proposal (RFP) is being introduced.

Current System

Currently the bidding process is structured to accommodate different cost thresholds, with a clear distinction between offline bids (amounting up to INR 25 lakhs) and online bids (exceeding INR 25 lakhs). These distinctions in the submission process aim to optimize efficiency and effectiveness in procurement.

For offline bids, the current practice involves the physical submission of bid documents. This traditional approach requires bidders to present hard copy documents for consideration.

In contrast, online bids are managed through the Online Portal of the Government of Uttarakhand, a platform developed by the National Informatics Centre (NIC), hereafter referred to as uktenders portal. This digital platform streamlines the bidding process, making it more accessible and efficient for stakeholders.

Within the realm of online bids, there are two distinct subcategories. The first category is known as Single Envelope Bids, where the evaluation centers exclusively on the price bid submitted. In this approach, technical details and other related information are not assessed separately.

The second category is Two Envelope Bids. In this case, bids are separated into two envelopes—Technical Bids and Price Bids. The Technical Bids are subject to evaluation independently of the Price Bids, allowing for a comprehensive assessment that takes into account both technical qualifications and cost considerations.

This tailored approach to bidding has been designed to strike a balance between efficiency and thoroughness, thereby ensuring that the procurement process is customized to meet the specific requirements and complexities of each project. For comprehensive guidance on participating in these bidding processes, as well as accessing relevant bid documents and announcements, interested parties are strongly encouraged to visit the official uktenders portal at https://uktenders.gov.in/.

For detailed information on the Two Envelope System and the associated Standard Bidding Document, please download the document from the following link: https://pwd.uk.gov.in/upload/downloads/Download-10.zip.

Gaps

1. Despite the Bidder submitting their Bids through the uktenders portal, they are still required to physically submit bid security, original affidavits, and bid costs in hard copy at the office of the Bid Inviting Authority. This practice inadvertently reveals the identities of the bidders before the bids are opened, potentially fostering collusion among bidders.

2. In the present system, communication between the Bid Inviting Authority and Bidders for clarification of bidding documents, pre-bid meeting minutes, and related matters is carried out through conventional methods like email and postal correspondence. This communication process is not yet seamlessly integrated into the uktender portal, which can introduce inefficiencies and potential delays in the bidding process.

3. Indeed, the current system poses a significant challenge for contractors, as they are required to upload a multitude of qualification documents every time they participate in a bid. These documents encompass a wide range of critical information, including firm details, ITR (Income Tax Return), partnership details, past work experience, specific work experience, equipment and plant machinery details, employee details, documents related to financial strength, current contract commitments, and litigation information etc. This extensive list of documents compounds the problem, as contractors must repeatedly gather, organize, and upload these documents for each bid they engage in. This not only consumes valuable manpower but also introduces a considerable risk of human error, as the information may not remain consistent across multiple submissions. Moreover, it opens the door to concerns that some bidders may manipulate or conceal certain documents based on the specific requirements of each bid or the preferences of the bidding requirement. This issue underscores the urgent need for a more streamlined and efficient document management process, which is a key objective of the proposed Bid Evaluation and Management System.

4. There is currently no centralized data bank or repository for contractors where their previously verified documents are readily accessible. Consequently, some bidders may submit different sets of documents for different bids, tailored to meet specific bid requirements. This fragmented system makes it challenging to establish a clear and consistent profile of

bidders, potentially leading to inconsistencies and inefficiencies in the bidding process.

5- Currently, in the case of Technical Bids, evaluations are manually conducted, introducing subjectivity in the process of determining the substantial responsiveness of bidders.

6- In the existing bidding process, bidding authorities are burdened with the task of repeatedly verifying the same set of bidder documents for each bid. Although these documents may have been previously checked and verified at some point offline, there is currently no efficient way to access this information. This redundancy represents a significant waste of valuable resources within the bidding agency, as it necessitates redundant efforts in document verification.

7- Moreover, the practice of multiple bidding authorities independently verifying the same bidder documents at different times introduces the risk of subjective decision variations. These discrepancies in evaluation can ultimately lead to disputes, litigations, and challenges to the fairness of the bidding process. Ensuring consistent and standardized evaluation criteria is essential for maintaining transparency and fairness.

8- Another critical aspect is the expertise of the individuals conducting document evaluations. In the current offline system, engineers within the bidding authority are tasked with evaluating various types of documents, including those related to finance, litigation, and work experience. This approach may introduce a margin of error due to the engineers' limited expertise in these specialized domains. To enhance accuracy, the proposed Bid Evaluation and Management System can integrate the capacity to deploy domain-specific experts such as Chartered Accountants and legal experts for finance and litigation evaluations. However, such specialized expertise deployment is challenging within the confines of the current offline system and can be cost-prohibitive due to the repetitive nature of document checks.

9- In the existing process, there is no online system in place for addressing grievances as an information to increase transperency . Bidders are required to raise objections through various channels, which can result in significant time delays in the bidding process. This lack of a streamlined and efficient mechanism for addressing grievances can impact the overall efficiency and transparency of the procurement process. Absence of

bidder-specific transparency is the significant gap in the current bidding process. After the evaluation, the detailed results are not readily accessible to all bidders participating in a particular bid. This lack of transparency means that bidders are often left in the dark regarding their own pass-fail criteria as well as those of their competitors. Without access to this crucial information, bidders are unable to identify potential errors or discrepancies in the evaluation process. The proposed Bid Evaluation and Management System seeks to bridge this gap by providing a platform where all participating bidders can access and review the evaluation results. This transparency empowers bidders to raise concerns, seek clarifications, and contribute insights to the decision-making process, ultimately fostering a more open and accountable bidding environment. This level of transparency and bidder involvement is currently not achievable within the confines of the offline system, highlighting the need for a more advanced and accessible digital solution.

10-   The uktender portal is designed for generic purposes and currently lacks department-specific dashboards or an automatic SMS/mail alert system for key officers to monitor the process. This absence of tailored departmental dashboards and real-time alert mechanisms hinders the ability of key officers to intervene and provide guidance to the Bid Inviting Authority in cases where the bidding process may be lacking or facing issues. An enhanced system with department-specific features and proactive alert systems would improve oversight and facilitate timely interventions as needed. Viewing each bid in isolation is akin to looking at just one piece of a larger puzzle. Bids are not standalone events; they are connected to a web of sanctioned works, demographic data of work offices, terrain considerations, contract management, and subsequent project management phases. To extract meaningful insights and support data-driven decision-making at policy levels, it is imperative that the proposed Bid Evaluation and Management System functions as a bridge, seamlessly linking with the existing Management Information System (MIS). By doing so, it will enable a holistic view of the bidding process, revealing patterns and correlations that inform decisions on various fronts. For instance, the system could assist in determining the required project timeline based on terrain, work type, and office demographics, or it could shed light on contractor participation trends based on work type, demography, and office locations. These data-driven insights can be

invaluable for shaping future policies and strategies. Isolating the current e-procurement system would be a missed opportunity for leveraging data as a powerful tool for informed decision-making and policy formulation.

11- There is currently no system in place for the release or refund of bid security for non-successful bidders. The traditional process for capital investment refund is time-consuming, which can pose challenges for bidders looking to participate in other bids promptly. This delay in the release of bid security can deter bidders and hinder their ability to efficiently allocate capital for future bidding opportunities. Implementing a more streamlined and efficient bid security refund process would encourage greater participation and improve the overall competitiveness of the bidding process.

Bid Evaluation and Management System

To address the gaps in the existing system, a proposed online system named "Bid Evaluation and Management System" has been introduced. This system is designed to work seamlessly with the existing uktender portal while also serving as a bridge between the uktender portal and the PWD MIS.

The "Bid Evaluation and Management System" hereafter referred to as Proposed System, is envisioned to enhance and streamline the bidding process by providing a comprehensive and integrated platform. It aims to address the following key objectives:

Formation of Bids through Templates: The PWD MIS system currently includes an online bid helper tool, designed to generate bid documents using the Standard Bidding Documents (SBD) approved in 2015. The proposed system aims to integrate and enhance this tool, providing Departmental Users with advanced features. By offering standardized bid document templates based on the SBD, the proposed system will not only simplify the bid creation process but also introduce validation checks to ensure accuracy and compliance. This integration ensures a streamlined and error-reduced approach to bid formation, ultimately elevating the overall efficiency of the bidding process..

Tender Info Tracking and Analysis: The system will enable efficient tracking and analysis of tender information, providing valuable insights to aid decision-making and improve the overall procurement process.

Efficient Document Management: With the proposed system, bidders will be required to upload their qualification documents only once. These documents will then be securely stored in a centralized repository, accessible to all relevant bidding authorities. This streamlines the process and ensures that accurate and consistent information is readily available for evaluation. Contractors will be actively encouraged to regularly update their information. Additionally, the department will maintain updated work-related information for contractors. This proactive approach will significantly reduce the necessity for last-minute, extensive manual document verification, promoting transparency throughout the bidding process.

Enhanced Data Integrity: To combat the possibility of manipulation or data discrepancies, the proposed system will implement robust security measures to safeguard the integrity of uploaded documents. Additionally, the system can utilize advanced data verification techniques to ensure that the submitted information remains accurate and unaltered. This not only reduces the potential for manipulation but also facilitates the auditing of bidder information over time, enhancing transparency and accountability.

Least Physical Interaction with Contractor: The system will minimize physical interactions with contractors during the bid submission and evaluation process, enhancing efficiency and reducing the risk of irregularities.

Enhanced Transparency: By centralizing bid-related communication and document management, the system aims to enhance transparency in the bidding process. Bidders, authorities, and stakeholders will have access to real-time information, reducing the potential for collusion or non-transparent practices.

Efficient Bid Evaluation: The system will automate and streamline the bid evaluation process, reducing subjectivity and human error. This will help in objectively determining the substantial responsiveness of bidders. The proposed system will offer a unified platform that integrates with the uktender portal. This integration will ensure that all bid-related activities, including document submission, communication, and evaluation, can be conducted efficiently within a single digital environment.

Expert Evaluation: Recognizing the limitations of having engineers evaluate diverse aspects of bids, the proposed system can incorporate the expertise of professionals such as Chartered Accountants and legal experts for assessing financial strength and litigation information, respectively.

This specialized evaluation process not only improves accuracy but also ensures that bids are assessed by individuals with in-depth knowledge in specific domains, reducing the risk of subjective decisions.

Online Communication: The proposed system will facilitate online communication between the Bid Inviting Authority and bidders, including inquiries, clarifications, and pre-bid meetings. This will eliminate the need for traditional channels like email and postal correspondence.

Transparency and Bidder Involvement: The proposed system goes beyond the current offline process by providing a transparent platform for all bidders involved in a particular bid. After the evaluation, results will be accessible to the participating bidders, allowing them to review their own and other bidders' pass-fail criteria. This feature encourages bidder involvement and fosters a collaborative environment where concerns or discrepancies can be raised and addressed promptly. It ensures that the bidding process remains fair, transparent, and accountable to all stakeholders.

Grievance Handling: The system will incorporate an efficient online mechanism for addressing grievances, reducing time delays in the bidding process. In line with the objective of transparency, the proposed system will facilitate a streamlined query resolution process. Bidders will have the capability to raise queries and concerns directly within the system. Bidding authorities can then respond to these queries in a transparent and timely manner, providing insights and clarifications as needed. This real-time interaction between bidders and authorities promotes open communication and minimizes the risk of misunderstandings or disputes.

one-point solution for contractor: Just as PWD HRMS currently serves as the central hub for employee authentication and access across multiple applications like HRMS. PWD Patch Reporting App and USDMA App, the proposed system can play a pivotal role for contractors and their personnel. The Bid Evaluation and Management System can offer an open API system for contractor authentication, ensuring seamless access to both current Management Information System (MIS) and any future systems related to contractor activities. This integration simplifies the user experience, eliminating the need for separate logins and authentication processes when accessing different systems. It not only enhances convenience but also ensures data consistency and security, reducing the administrative burden on both contractors and the Public Works Department. Moreover, this approach supports scalability, making it easier

to onboard new systems in the future without the complexities of managing separate authentication processes.

Bid Security Refund: A streamlined process for the release or refund of bid security for non-successful bidders will be implemented to expedite capital recovery.

The introduction of the "Bid Evaluation and Management System" represents a significant step toward modernizing and improving the bidding process, making it more efficient, transparent, and user-friendly for all stakeholders involved in procurement activities within the Uttarakhand Public Works Department. This digital transformation not only saves time and resources but also enhances the overall integrity and fairness of the procurement.