



## **WHITE PAPER**

# What is Internet bidding and what are the benefits?

Dr. Joseph Rowland  
Info Tech, Inc.  
January, 2013

## Summary

---

The increasing availability of Internet bidding opportunities shows that agencies are transitioning from paper processes due to the significant benefits that Internet bidding offers. This paper describes the Internet bidding process and demonstrates how it solves many of the problems related to the inefficiencies and flaws inherent in advertising and accepting paper based bids and proposals.

## Introduction

---

Public agencies seeking to procure goods and services priced above a certain threshold are typically required to put such items out for competitive bid. This process is meant to be fair, open and accessible to qualified contractors, vendors and suppliers. Ideally, the information flows easily from owner-agencies to the bidding community, with bidders aware of opportunities available and having ample time to prepare and submit a bid or proposal. Agencies use a variety of processes to distribute an RFP/RFI/RFQ/ITB, but there is a general workflow that all must follow. First, an owner-agency lists and describes the desired goods and/or services and provides the necessary paperwork required for vendors. There may be pre-bid meetings, vendor registration or approval, walkthroughs, or other intermediary steps that bidders must complete in order to be considered eligible to bid. Next, vendors complete the paperwork, include their pricing, obtain notarization of signatures on affidavits and signature pages, and submit sealed bids or proposals by a predetermined deadline. These submittals are often delivered directly to the owner-agency office via a courier or representative of the bidding firm, or are sent via an overnight delivery service. Finally, the owner-agency opens all submitted bids or proposals and, in the most frequent case, the lowest bidder and/or best qualified firm wins the solicitation and performs the work and/or supplies the goods.

While this process seems simple, it is actually quite complex and often becomes more complex over time as procurement rules and requirements change. Due to the competitive nature of bidding and the public funds involved, the process is carefully regulated and closely scrutinized. Procurement officers must remain abreast of ever-changing codes, rules and requirements meant to ensure a fair and secure process. Unfortunately, these laws and rules vary significantly from state to state, city to city, and even within divisions of an agency, making the process complicated for bidders and increasing the likelihood of mistakes. Further complicating the process, a single bid can have hundreds of items, require stacks of forms and affidavits, necessitate a bid bond, include hundreds of computations, and take literally hundreds of person hours to execute. In addition, there is typically no correlation between the complexity

of the bid and the overall size of the potential contract, leaving bidders with the dilemma of whether completing a bid is worth the effort involved for a smaller project or an item that has a slim profit margin. Complexity in bidding increases costs for bidders, which they often build into their prices. This, coupled with the high administrative costs of operating and processing bids means that the agency – and ultimately the tax payer – absorbs these costs.

Internet sealed bid submission debuted in the late 1990s and has extremely high levels of adoption in certain niche areas and virtually no adoption in others. As this technology has matured, more and more public agencies are taking notice and seeking out services to improve their solicitation management process. Upon closer inspection, it is easy to see why. All aspects of the paper bidding process are seamlessly transitioned to online functions (with many becoming irrelevant due to the adoption of technology), along with added checks for errors and omissions. Agencies know that the costs of avoidable errors and inefficiencies of paper-based bidding are astounding; however, many agencies are quickly realizing that bringing the power of technology, the ease of Internet submission, and the security inherent in the best systems helps them make these errors and inefficiencies virtually non-existent.

## Paper-based solicitations - inefficiencies for owner- agencies

---

*Additional costs due to bidder error-* Purchasing agencies of all sizes and budgets lose thousands, hundreds of thousands, and in some cases, millions of dollars annually due to paper bid submission errors. Competitive solicitations or sealed bidding opportunities often require that several required documents or forms be completed, terms and conditions are recognized, that simple math extensions and totals be performed if a quantity extension of a per-item price is required, and that the submission be signed by the bidder. Often, a bidder's notarized signature and/or initials are required on multiple supplemental documents that must be included with the bid. In attempts to comply with all of these requirements, even a diligent bidder is apt to omit an occasional checkmark, make a simple math error, fail to complete a required form, or to overlook signing on a dotted line. The result for the owner-agency is that they may be required to reject the low bid or proposal. At times, the additional cost and administrative delay to the owner-agency can be damaging to the owner-agency, not to mention the possibility of defending against a legal challenge from the rejected bidder.

*Project delays-* When a bidder is deemed non-responsive, there can be an occasion when that vendor/contractor will dispute the decision and take action against the successful bidder and/or the owner-agency. This often delays the purchase for the owner-agency and can put the owner-agency behind schedule should the purchase be for a critical service or construction related project. There are many stories of important, public facing projects facing protracted delays due to disputes over problems related to a bid submission. These delays have even led

to agencies missing important deadlines related to funding, meaning federal or state monies earmarked for the project could be lost.

*Paper management administrative costs-* For an owner-agency, the paper sealed bid process causes labor inefficiencies. After a solicitation package has been finalized, the owner-agency must produce several copies of the package for interested vendors/contractors to pick-up and/or purchase from the owner-agency. The owner-agency must also provide paper copies of supplemental information that is crucial to the bidder, such as plan sheets for a construction project. Agencies spend large amounts of budgeted dollars for staff and supplies to perform these printing and purchasing tasks. Similar administrative costs often occur after the bid opening time when an agency starts its evaluation process if the staff must rely on paper.

*Bid opening-*When paper bids are received, they are carefully stored in a secure place until the bids due time. Many solicitations require that vendors provide multiple copies of their response to the agency for the evaluation team which can become a cumbersome process to manage. Bid openings are also often chaotic scenes, with contractors lining hallways, frantically updating bids due to last minute cost changes from suppliers, and rechecking their math. Bids are then opened by a team and checked for errors and omissions. The team performs manual data entry of total costs to determine a low bidder, or rates proposals on paper to determine best value. This process can take a full day and dozens of staff hours to ensure procedures are followed and processes documented.

## Paper-based solicitations - inefficiencies for bidders

*Jobs lost due to avoidable errors-* Nothing is more upsetting to a bidder than hearing from an owner-agency that his or her sealed bid or proposal is deemed non-responsive due to a clerical or mathematical error. The larger the loss of possible income, the more likely the bidder will be to fight the decision. At times, non-responsive bidders will dispute the award of the successful bidder and/or the owner-agency. The result can be lengthy, time-consuming, litigious situations that put awarded bidders behind schedule, and cause extra expenditures for legal fees.

*Paper bidding costs-* Vendors/contractors spend many labor hours searching owner-agency advertisements, picking up the proper documentation, compiling hand-written proposals or bids, ensuring that the bids are complete and error free, and delivering sealed paper bids to the owner-agency. Preparing bids and proposals that are dozens of pages long is tedious. If an error or omission is discovered, re-printing and recalculating takes time, effort and labor. These costs are often built into bids and thus are ultimately paid by the owner-agency.

*Travel costs-* Bidders incur travel and direct staff labor costs to pick up bid packages, attend required owner-agency meetings, and return sealed bids to an owner-agency. This can include costs for gas, pay for employees and fees for couriers. Even a simple overnight package can be expensive when a proposal is large and/or requires

multiple copies. Reducing these direct costs allows more businesses to participate with agencies/buyers, thus expanding and improving competitive pricing.

## Reducing an owner-agency's carbon footprint

---

Internet bidding and solicitation management also makes a positive environmental impact. Owner-agencies can rid themselves of the time, expense and paper waste of printing of bid books, plans, solicitations, plan holders lists and more. Solicitations for complex services or projects containing hundreds of items could easily be hundreds of pages that are printed and then re-printed by both owner-agency and vendor/contractor staff members resulting in major paper waste. Vendors and contractors also avoid driving to the owner-agency to pick up solicitation documents, plans and also to submit proposals or bids. These can be ten-mile trips to a city or county, or 300 mile treks to the state capital. With Internet bidding, all of those CO2 emissions are saved.

## Workflows and processes for online solicitation management

---

With Internet bidding services, owner-agency users build solicitations online using templates and saved components. Given the idiosyncrasies of bidding processes among agencies, these components must be customizable and versatile. Ideally, every aspect of the paper solicitation is created as an interactive electronic form, so that owner-agencies don't need to make drastic changes to their processes. Owner-agencies may mark fields/sections as mandatory or optional as desired and identify sections as alternates if required. The contract preparation tools within the service also allow for the attachment of files that may be downloaded, and if needed, completed and returned with the vendor's proposal or bid. The owner-agency sets a solicitation opening deadline and puts the solicitation out for bid via the online service.

Owner-agencies can inform their suppliers or contractors of the online solicitation in many ways. They can create links from their website and send emails containing a link to the solicitation to their business partner community. As the use of the bidding website grows among the business community, this becomes less of a burden on the owner-agency since vendors can sign-up via the bidding service to be alerted any time a particular owner-agency posts a solicitation.

Firms who are interested in a given solicitation can then select it for bidding. Bidders fill in the required forms and solicitation requirements, as well as prices, which are automatically extended and totaled. Additionally, the service overtly alerts the bidder when a submission is incomplete.

To ensure the integrity of the sealed bidding process, bidders must register notarized paperwork with the bidding service to verify the identity of the signer of the bid and provide a digital key for signature and encryption. Bidders can enter, revise, withdraw, and re-enter bids or proposal content at any time until the bid submission deadline. All submissions, including attachments included with the bid, are digitally signed, encrypted and securely transmitted to a lock box. Since the bids are encrypted while in the lock box, they cannot be accessed by any party other than the bidder. Once the bid submission deadline has passed, only the owner-agency is able to open and view the submitted proposals/bids. "Bids as read" can then be posted to the Internet as "apparent bids" directly under the owner-agency's control.

In the solicitation process, changes are common. When an owner-agency needs to issue an addendum or amendment, following protocol and communicating updates is of the utmost importance. With online solicitation management services, agencies can be assured that bidders are automatically alerted to addenda/amendments, and that overt visual cues and managed processes within the bid preparation system made it virtually impossible to submit a proposal without them.

For both agencies and bidders, the technology involved in online solicitation management is very approachable. Chances are, if an individual has ever made a purchase online, he/she has enough technical know-how to manage solicitations online and respond to them. There is typically no special equipment needed - just a computer with Internet access and a standard web browser. Live customer support provided by the service provider can be a benefit for the first few solicitations and provide bidders with just-in-time training to instill confidence that their bids are delivered securely and completely

## Conclusion

---

The age-old method of accepting paper bids and proposals is being pushed aside for online solutions that reduce costs for both owner-agencies and bidders, eliminate avoidable errors associated with solicitation management, and save time in removing the handling of paper documents. All aspects of the paper bidding process are available electronically, so the transition is simple and easy and leads to significant gains in efficiency. Adoption by public agencies is spreading quickly with the many benefits in mind. Vendors/bidders are on board as well given the convenience of submitting secure, complete bids from their office or wherever they connect. Environmental benefits are an added plus.

# About the author

---

Dr. Joseph Rowland has been actively engaged in the development and promotion of Internet bidding and bonding technologies since 2007. He works directly with public agencies who are researching and/or implementing Internet bidding services. Dr. Rowland works for Info Tech, Inc., a company that has been providing Internet bidding and online bid bond verification services since 1999. Dr. Rowland is currently Director of the Info Tech products team. In this capacity, he collects and manages product and service development input from various stakeholders and channels it to the development teams. He works closely with the development teams for Info Tech's Internet bidding applications.



Prior to joining Info Tech, Dr. Rowland worked as the Lead Instructional Designer for the V-22 Osprey Pilot Training Program. As a civilian contractor, he worked with United States Marine Corps, Air Force, and Navy pilots and trainers, graphic designers and subject matter experts to develop and maintain training courseware for incoming and transitioning pilots. He has also worked on a variety of instructional media projects and has experience as a university level educator and teacher trainer both in the United States and abroad.

Dr. Rowland holds a Ph.D. in Instructional Technology from the University of Texas at Austin. He specialized in Instructional Media and the integration of technology into curricula and instructional training programs.

# About Info Tech, Inc.

---

Established in 1977 and based in Gainesville, Florida, Info Tech, Inc. provides software development, Internet bidding and systems integration services for infrastructure construction management, and also provides highly technical consulting and network communications services. Info Tech' software products, services and professionals serve public agencies, consulting engineers, contractors and bidders. Info Tech has a highly skilled workforce of more than 230 professionals, and maintains regional and project offices throughout the U.S.

Additional copies of this paper are available upon request. Please contact [info@infotechfl.com](mailto:info@infotechfl.com).



5700 SW 34th Street Suite 1235 • Gainesville, Fla. 32608-5371 USA  
Phone +1 (352) 381-4888 • Fax +1 (352) 381-4444  
[www.infotechfl.com](http://www.infotechfl.com)