

**REGULATION OF E-AUCTIONS IN THE US FEDERAL PROCUREMENT SYSTEM:
LESSONS FROM THE E-AUCTION RULES IN THE UNITED KINGDOM**

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ABSTRACT. Following the advent of e-auctions, many public procurement systems now contain rules on the tool. In the United States of America (US), since the rewrite of the Federal Acquisition Regulation (FAR) in 1997, which removed language that prohibited the use of e-auctions, experience with the technique has continued to grow. However use of e-auctions in the US has remained largely unregulated leading to concerns about the various practices adopted by federal procurement agencies. Existing research suggests that concerns with e-auctions use in US federal procurement could be resolved by carefully developed rules. This study which draws on empirical research conducted in the United Kingdom (UK), where formal rules on e-auctions have existed since 2006 as a result of the implementation of the European Union (EU) procurement directives in the UK - offers some perspectives on regulating e-auctions to the US and other public procurement regimes interested in the tool.

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1. INTRODUCTION

Electronic reverse auctions (or e-auctions) are dynamic downward bidding events linking procuring entities and tenderers in real time. There are many variants (Arrowsmith, 2005). However, in its basic form the procuring entity sets up an electronic platform, advertising the auction. Precise specifications of what is to be procured are set out. Potential tenderers then log into the site hosting the event to participate in the auction. At the appointed time the auction starts and tenderers put in their tenders electronically. The price of each tender (but not the particulars of the tenderer) is simultaneously available to all participants. This enables other participants to put in a lower bid. The tender is then awarded automatically to the lowest tenderer at the close of the auction. The close of the auction can occur at either a determined time or after the expiry of a set time after the last bid. Criteria other than price which are quantifiable, can be included in an e-auction. However, if criteria other than price are specified, such criteria are evaluated electronically by means of a mathematical formula. The results of each tender are immediately and simultaneously available to all participants. (Arrowsmith, 2009; Le Roux de la Harpe, 2009; Beall, *et al*, 2003).

E-auctions first emerged in private procurement in the late 1990s following advances in electronic technology (Parente, 2008). As a result of perceived advantages of the tool, such as lower contract prices, reduced administrative costs and procurement timescales, and increased transparency, (Shalev and Asbjornsen, 2010; Ausubel and Cramton, 2006), use of the tool has extended from private sector procurement to the public sector. Despite its potential benefits, a number of negative effects have been identified with its use. The major concerns against the tool include that by placing too much focus on price and ignoring other fundamental criteria such as quality, delivery schedule and supplier performance, the tool destroys buyer/supplier relationships and potentially conflicts with the development of long-term benefits associated with cooperative buyer/supplier alliances. It has also been suggested that e-auctions encourage unethical behaviour such as facilitating collusion between suppliers (Tassabehji, 2010; Albano *et al*, 2006; Daly and Nath 2005a; Daly and Nath 2005b; Emiliani and Stec 2005; Jap, 2002).

In the private sector, in response to real and perceived concerns about e-auctions, some industry trade groups representing suppliers have developed voluntary codes of conduct, and other forms of guidance aimed at improving the e-auction process and relationships between buyers and sellers. These include voluntary guidelines developed by the U.S. auto industry, the European aluminium foil industry, the European flexible

packaging industry, European carton makers, European wire and cable makers, Canadian general contractors, and British aerospace companies (Emiliani, 2005).

Interestingly, some countries have also introduced formal legal rules for use of e-auctions in private sector procurement. In France, e-auctions in private procurement have been regulated by the Commercial Code since August 2005. The Code seeks to ensure that private purchasers who opt to use the tool comply with a number of transparency obligations – including a duty to publish in advance information about the procurement and the procedure to be followed in the auction – most notably on the award criteria (Lichere, 2009).

Given the increasing popularity of e-auctions in public procurement, many procurement instruments, now regulates its use. However, in some regimes, notably in the US federal procurement system, experience with e-auctions continues to grow largely unregulated (Yukins, 2009, Merson, 2000). The absence of formal rules in the US federal procurement system has occurred as a result of the failure of congressional initiatives to produce government wide regulation on the tool.¹ A first attempt commenced in 2000 following requests by the Defence Acquisition Regulations Council and the Civilian Agency Acquisition Council on whether there was a need for guidance e-auctions resolved that it was premature to develop FAR guidance on the tool. A second attempt to regulate the tool initiated in May 2005 also failed to produce regulatory provision. Reasons for the inability to regulate the tool in the US federal procurement system include industries' opposition to any rules that institutionalises the tool, uncertainty over how any rules should be shaped to match rapidly changing practices, and caution about creating binding rules which if violated, could lead to challenges (Yukins, 2009).

The inability of Congress in the United States of America to put in place formal rules on e-auctions has given rise to various developments, including protests. Firstly, there exists a plethora of agency rules on the tool, for example; the *Reverse Auction User Guide* introduced by the GSA; the *Commercial Items Handbook* issued by the Office of the Secretary of Defense, Acquisition, Technology, and Logistics (Acquisition Initiatives); and the *Source Selection Guide* published by the Army. One effect of guidance on the tool from the different agencies is that in the absence of any formal direction at federal level, the agencies' rules fluctuate considerably both in quality and quantity possibly encouraging disharmony and inconsistencies in a system which ordinarily is highly regulated. A further effect arising from the absence of rules on the tool in the US federal procurement system is that

hundreds of e-auctions have been organised within the system, unguided and unregulated spawning a number of practices that raise concerns for fundamental principles of US procurement law (Yukins 2009; Brown and Ray, 2007; Yukins and Wallace, 2005). Specifically, Yukins and Wallace, note that the regulatory void has permitted the use of e-auctions in which the procuring entity evaluates non-price factors after concluding the price auction, which is contrary to US public procurement principle, since bidders in the event would have no idea of the relative weight that price and non-price factors would have on the evaluation.

As e-auctions continue unregulated, concerns regarding the tool continue to rise. In January 2012, the Office of Advocacy of the U.S. Small Business Administration pointed out that the absence of uniform clarity in policy or regulations on e-auctions had created a situation of uneven application of the tool by agencies. Consequently, it requested the Office of Federal Procurement Policy – which plays a central role in shaping the procurement policies and practices of federal agencies – to review existing government policies and practices on e-auctions and to adopt a clear policy statement on the tool, including on the contracts for which the tool is suitable (Office of Advocacy, 2012). More recently, in March 2012, e-auctions in the US has come under further scrutiny. This followed the decision from the Veterans Affairs Department to stop the Veterans Health Administration from using the tool, pending investigations on alleged possible problems created by the tool (Termin, 2012; Weigelt, 2012; Kelman 2012). The decision to halt the use of the tool has attracted a lot of interest and once again brought to the spotlight concerns about e-auction practices in US federal procurement.

Prior to these developments, Wallace (2005) had pointed out the many questions which exist regarding the tool including questions regarding the proper procedures for organising e-auctions, the types of contracts suitable for award using the tool and the approach to regulating the tool. To improve the effectiveness of the tool in the US federal procurement system, existing research suggests that clear, carefully developed rules could provide improvements to the US procurement process (Yukins, 2009, Brown and Ray, 2007). Focused on improving the e-auction process in the US federal procurement system, and on potential benefits which experiences from the UK on e-auctions could offer the US system, this paper provides lessons from the regulation of e-auctions in the United Kingdom, which may be useful for future regulatory initiatives on the tool in the US. The lessons are drawn from empirical research conducted in the United Kingdom, which examined various perspectives on the e-auction rules in the 2004 EU procurement directives,² implemented in the 2006 UK procurement regulations.³ Currently, there are ongoing negotiations aimed at revising the

EU procurement directives generally with the aim of ensuring a more efficient European Procurement Market and to support a wide range of other policies.⁴ Significantly, the proposals for reform of the Directives indicate that contracting authorities will have at their disposal a set of six specific procurement techniques and tools including e-auction to support aggregated and electronic procurement. Thus it is envisaged that e-auctions would continue to feature as a procurement tool available for contracting authorities who may wish to adopt the technique in their procurement. The specific rules on e-auctions are contained in Article 33 of the Proposal for a Directive of the European Parliament and of the Council on public procurement and Article 47 of the Proposal for a Directive of the European Parliament and of the Council on Procurement by entities operating in the water, energy, transport and Postal Services Sectors. Compared with the existing Directives, the proposed rules on e-auctions are very similar to those contained in the existing directives, except for very minor amendments aimed at improving and clarifying the existing rules.⁵ The main amendment is in relation to the information which contracting authorities which elect to use an auction must include in the specification. Under the existing directives, this information is contained in the main text of the directive. In the proposal, the information is now contained in an annex - Annex VII on information to be included in the specifications in electronic auctions.

It is important to note that the existing e-auction rules in the EU procurement directives have influenced the e-auction rules contained in many procurement instruments such as the WTO Agreement on Government Procurement⁶ and the UNCITRAL Model Law on Public Procurement⁷ (Arrowsmith, 2009). In the light of the possible influence of the EU e-auction rules on initiatives on e-auctions (including regulations) in the US federal procurement system, this study offers some evidence to demonstrate how rules similar to those in the EU procurement regime, might support developments on e-auctions in the US - including on any future regulation of the tool in the US. Interestingly, to some extent, the UK has a related e-auction experience to the US federal procurement system, in that prior to the implementation of the 2006 procurement regulations (which includes detailed rules on e-auctions modelled on the EU framework), as far back as 2002, many public entities in the UK had gained some practical e-auction experience - in the absence of rules on the tool (Arrowsmith and Eyo, 2009, Eyo, 2012).

The rest of the paper is structured as follows: section 2 below explains the methodology adopted for the empirical research. Section 3 discusses the results from the research while section 4 concludes the paper.

2. METHOD

The study aimed to understand early perceptions of the e-auction rules in the EU procurement directives by drawing upon experiences of various participants in UK. It focused on extending analysis of the e-auction rules beyond the theoretical assessment in existing literature (Arrowsmith, 2005, Trepte 2007) to providing empirical data drawing on experiences of various users within the UK. This was achieved using semi-structured interviews with 62 participants from policymakers, procuring entities, electronic auction service providers, legal practitioners and suppliers, selected using purposeful and theoretical sampling.

As the policy aim of the study was to draw lessons for e-auctions regulation, the study sought information from participants on specific aspects of the e-auction rules: award procedures for which auctions are used; contracts which may or may not be suitable for award using the tool; conditions that need to be satisfied before recourse can be made to tool; the auction process and the technical devices used for organising auctions. The study further sought to understand users' responses to the rules including whether they choose to follow what they perceive to be the correct interpretation of the rules, or whether they elect not to follow the rules.

An empirical strategy involving a qualitative method was selected to investigate the above issues. This was based on the recognition that the approach was most appropriate for achieving the aims pursued by the study (Gray, 2004; Baldwin and Davis, 2003). Data collection was undertaken through semi-structured interviews which provided participants with opportunities to describe in their own words pertinent issues regarding the rules. The semi-structured interviews also allowed for detailed probing of their views. The interviews were based on questions contained in an interview guide, developed around e-auction rules in the directives. While the introductory section of the guide focused on participants' knowledge of, and experience with the tool, the main sections sought to uncover their perceptions, knowledge and experiences with the specific provisions on: award procedures for which auctions are available; contracts which may or may not be suitable for award using the tool; conditions that need to be satisfied before recourse can be made to the tool; the auction process including the technical devices used for organising auctions. The concluding section of the guide elicited participants' final comments and assessment of the rules.

Participants in the research were selected from a wide population - users of the EU procurement rules. An initial identification of persons falling within this general population was undertaken before sampling strategies were applied to ensure the use of a sample capable of reflecting diverse perspectives on the rules. Initially, purposeful sampling - the intentional selection of information-rich sources - was applied to select participants based on their ability to provide information on the e-auction rules. As the research progressed, theoretical sampling was subsequently applied to select additional participants according to the developing categories and emerging theory (Gray, 2004).

Recruitment of participants was by emails addressed to several organisations falling within the identified categories followed by series of telephone calls. This ensured that the participants in the research were the appropriate personnel and increased the response rate. Some difficulties were, however, experienced in accessing the entire research sample which led to 62 participants (out of 165 contacted) participating in the research. These comprised:

- (i) 9 key policy makers from the United Kingdom from central government departments and Regional Centres of Procurement Excellence;⁸
- (ii) 8 procuring entities (comprising public sector bodies and utilities including those that had used auctions and those that had not);
- (iii) 4 electronic auctions service providers;
- (iv) 7 law firms involved with public procurement work; and
- (v) 4 suppliers who had participated in public contract awards which involved an auction stage.

In relation to timelines, the exploratory work and desktop research on e-auctions in procurement (including public procurement) commenced in February 2005. However identification, sampling and recruitment of participants commenced in August 2006 with interviews with participants conducted between 9th October 2006 and 6th August 2007. Data analysis took place between September 2007 and December 2008.

Interviews with participants were mainly by means of face to face interviews, the duration of which ranged between 30 minutes and 1 1/2 hours. During the interviews, the order of questions was rotated depending on discussions with participants. Opportunities for clarification of earlier responses were provided to participants throughout the research. All but one of the interviews was recorded using a digital voice recorder. Shorthand notes were also made during the interviews. Most participants took part in the interview

through face to face interview sessions. Nine participants however participated in the study through telephone interviews while five other participants who could not participate either through face to face or telephone interviews were given the opportunity to provide written responses to the interview guide. The interviews were conducted on the understanding that none of the participants would be specifically identified by name; that the recordings and notes of the conversations would remain confidential; and that statements from participants would not be presented in a way that would identify the participant. This approach was taken because it became apparent after a few interviews, (including one that involved a participant who declined to be recorded), that some participants (mainly public sector officials) preferred to speak freely on issues, where the above conditions were guaranteed).

After the interviews, the recordings were transcribed. An interview report comprising the transcribed data and shorthand notes was then produced for each participant. Subsequently, data analysis was conducted. This involved immersing in the collected data, systematically coding and classifying the data through the process of induction (Marshall and Rossman, 2006) and deriving results to the issues raised regarding the e-auction rules.

3. DISCUSSION AND RESULTS

3.1. Participants' experiences with auctions and the rules

At the beginning of each interview, participants were first examined on their knowledge of and experiences with auctions, including the rules in order to understand whether or not there was any difference in their auction practices and policies *prior to*, and *after* the introduction of the rules and if any such difference was as a result of meanings attributed to the rules by participants. Participants' responses to the question also provided information for establishing the relevance of other contributions made by the participant.

All the participants interviewed for research commented on their e-auction experiences. These included: involvement with either developing "best practice" on auctions and/or helping entities to operate auctions in accordance (policy makers); using e-auction events to award contracts (procuring entities); organising e-auction events – (e-auction providers), provision of legal advice on general procurement issues including those which arise from e-auctions (legal practitioners) and participation in a number of auctions as suppliers.

On experienced impact of the e-auctions rules, some of the observations by the participants were that

(i) The introduction of the rules introduced some change to e-auction practice. The change was in relation to the software that the entity could use to run auction events. The affected participant noted that as a result of a provision in the rules which required information to be made available to participants to enable them to ascertain their relative rankings during and at the close of the auction,⁹ it had to develop new software for its events.

(ii) Participants (mainly procuring entities) commented that the availability of e-auction rules had made suppliers more comfortable about its use. A few remarked that in their opinion the rules may have contributed to stimulating e-auction practice (although at the time of the empirical research, it was too early to assess this issue in detail). Some other factors - government funding and support for the tool were however suggested as the main drivers for the tool.

(iii) Suppliers noted that the rules had contributed to some improvements in the e-auction process. One supplier noted that prior to the rules, in some events they were bidding blindly - without sufficient information on the auction - but that the position had changed following the rules, as procuring entities were now making them more aware of the exact conditions applicable to events at very early stages of the process.

(iv) Legal participants remarked that the rules had encouraged their clients to consider in detail the sorts of actions they could or could not engage in during the auctions.

3. 2 Award procedures within which e-auctions may be organised

Unlike some procurement systems, where an e-auction can be used as a stand-alone procurement procedure (for example, in Brazil, Levy, 2009), the EU framework provides for the use of e-auctions as part of some of the standard award procedures available under the directives. Thus under Article 54(2) of the Public Sector Directive, auctions may be used in the open, restricted or negotiated procedures with a notice/call for competition when the open or restricted procedure has failed to produce satisfactory results – for example, following irregular or unacceptable offers. E-auctions may also be used when competition for a contract is reopened under a framework agreement or in contracts to be concluded under the dynamic purchasing system. On the other hand, auctions may not be used in the context of the competitive dialogue procedure. For the Utilities Sector, Article

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56(2) of the Utilities Directive states that in open, restricted or negotiated procedures with a prior call for competition, procuring entities may decide that the award of a contract shall be preceded by an electronic auction when the contract specifications can be established with precision. Auctions may also be held on the opening up for competition of contracts to be awarded through the dynamic purchasing system. Unlike the Public Sector Directive, Article 56(2) of the Utilities Directive does not refer expressly to the use of electronic auctions under framework agreements.

Evidence from participants covered by the public sector directive indicates that all of the entities interviewed for the research who had used the tool (20 out of the 23 public sector entities interviewed) had adopted same within the restricted procedure. The main rationale offered by them was that the restricted procedure was their preferred procurement method. None of the participants interviewed had ever adopted the tool within the open or negotiated procedure. On use of the tool within frameworks, 4 interviewees (two local entities, one non-departmental agency and one wider public sector entity) reported that they had adopted the tool to run mini-competition within frameworks. Many interviewees commented that as frameworks become more popular, they expect to organise more auction events within these arrangements. On dynamic purchasing systems, no participant had ever used the tool within same as no recourse had yet been made to the system by the interviewed participants.

Evidence collected from participants covered by the utilities directive showed that no utility had used the tool within the open procedure due to the fact that none of the participants with experiences of organising auctions (7 out of the 13 utilities that participated in the research) had used the open procedure for its procurement. With regards to the restricted procedure, only one utility out of the seven utilities with experience of using auctions had adopted the tool within the procedure. The participant indicated that it had conducted six auction events, and that all the events were adopted within the restricted procedure. The remaining utilities adopted the tool within the negotiated procedure. According to these participants, the prevalence of the tool within the procedure simply reflected their general preference for the procedure.

On the question of whether they had encountered any change in the process of conducting auctions within the negotiated procedure following the rules, all but one interviewee commented that they had not experienced any change. The entity who offered a different experience mentioned that the main change he had witnessed was in relation to the fact that certain auction variants could no longer be adopted by his organisation. He

commented that prior to the auction rules, when using auctions under the negotiated procedure, his organisation did not need to build price and quality into the auction event, as these aspects were catered for separately, with the quality assessments applied after the auction event on price. However, following the auction rules, the organisation could no longer organise the process in that manner. He noted that this had curtailed the organisation's discretion as previously it could organise the auction event and later build in the quality assessments following the price event. This issue is discussed in detail in Section 3.7 below, which explains the various auction models used in regulated procurement.

3.3. E-auctions and contract types

Some procurement systems stipulate the type of contracts that may be awarded using the tool, and may expressly exclude the use of the tool for certain requirements, such as works and complex contracts. (Lichere, 2009, Levy 2009). Under the EU framework, Recital 14 of the Public Sector Directive and Recital 22 of the Utilities Directive indicate that e-auctions may be used works, supplies or services provided for their specification can be determined with precision. In addition, Article 54(2) of the Public Sector Directive and Article 56(2) of the Utilities Directive provide that the award of a public contract shall be preceded by an auction when the contract specifications can be established with precision. From these provisions, it is clear that a condition for using auctions is that recourse to the tool should be made only when the contract specifications can be established with precision. This requirement reflects the highly automated nature of the auction, whereby only the elements of tenders which are capable of automatic evaluation (either directly in terms of price or indirectly in terms of attributed values/prices or through the use of mathematical formulae operated by the electronic auction software itself) are suitable for inclusion in the auction.

There was a general opinion from the participants in the research that auctions are most suitable for "supplies contracts". Many procuring entities commented that they generally use auctions for "supplies contracts", due to the fact the specifications for such requirements can easily be defined with the main differentiator between bids being usually the price. On the availability of auctions for "services contracts", some participants remarked that even though they considered the tool as useful for the award of such contracts, they were reluctant to use it in certain circumstances because of problems with modelling appropriate auctions suitable for their award, since quality and price are usually significant criteria in the determination of the

best bid. On “works contracts”, many participants (mainly procuring entities) raised concerns over the availability of auctions for these contracts and commented that such contracts should not be awarded like commodity contracts as there are a lot of “unwritten” criteria which go into the evaluation of whether or not any economic operator will be the eventual winner. Apart from one participant who had used the tool to procure a small kitchen renovation contract, most participants commented that they had not considered using auctions for such contracts, because of the complexity of their requirements. A few participants (mainly policy makers) however remarked that small or standard works contracts could be procured using the tool. The auction service providers further commented that they had encountered some difficulties with convincing their clients to use the tool for works contracts.

On the related question of contracts unsuitable for award using e-auctions, Article 1(7) of the Public Sector Directive and Article 1(6) of the Utilities Directive state that “certain service contracts and certain works contracts having as their subject-matter intellectual performances, such as the design of works, may not be the object of electronic auctions”. The literature on the issue suggests that this provision is open to various interpretations – including one which posits that auctions can never be used for such contracts (Arrowsmith and Eyo, 2009, pp. 430-433; Arrowsmith, 2005, pp. 1190-1191).

During interviews, a range of opinions were expressed by participants. One participant – an e-auction service provider - commented that he had encountered some clients who firmly believed that there is some exclusion against using auctions for such contracts. Similarly, a participant from the public sector reported that various opinions existed on the issue within his organisation such that the participant and the firm’s legal adviser had different views on the issue. Some participants questioned the rationale for excluding any contract with one participant (policy maker) commenting that he did not expect the law to regulate specific contracts to be procured using the tool. In his view, such a decision should be within the discretion of each entity to be determined on a case by case basis. On whether they had encountered any practical problems as a result of the provision, one procuring entity explained that prior to the implementation of the e-auction rules in UK procurement law, his organisation had taken steps to procure a contract for market research and design services using a procedure involving an e-auction phase. The participant noted that following the introduction of the rules (which occurred during preparations for the tender), the organisation was advised by the legal adviser that it could no longer

integrate an e-auction stage into the award procedure, based on the view that it is not permissible to procure such contracts using the tool.

3.4. Participants' views regarding conditions for using auctions

3.4.1 Information on intention to use auctions as part of the procurement procedure

The e-auction rules in the directives require procuring entities to notify tenderers in advance of their intention to use an auction stage (Arrowsmith and Eyo, 2009, pp. 442-444; Arrowsmith, 2005, pp. 1192-1193). The requirement is mandatory and means that a procuring entity which fails to indicate an intention to use e-auctions is precluded from using the tool. The purpose of the rule appears to be to provide notice to tenderers on the possibility that an auction phase will be used in the contract award process, and possibly to support the equal treatment obligation of the EU procurement framework. For entities covered by the public sector regime, Article 54(3) of the Public Sector Directive requires them to state this information in the contract notice. For utilities, Article 56(3) of the Utilities Directive requires them to provide the information in the notice used as a means of calling for competition, which may include the periodic indicative notice (PIN) – a notice giving general advance information to the market of a procuring entity's future requirements or a notice on the existence of a qualification system - a registered list of firms qualified to supply contracts to a utility which eliminates the need to provide and evaluate separate qualification information for each contract.

The main issue with the requirement appears to be the challenge of compliance created for utilities. This is because the requirement implies that a utility intending to use an auction must notify that fact to tenderers at a very early stage of the procurement process, even where the utility may not have yet made a definitive intention to use the tool. Arrowsmith (2005, pp.1192) argues that the difficulty arises from the fact that when utilities issue PINs, they may not know the details of the specific award procedure that they would use when they later go out to tender. In circumstances where a qualification system is used, the utility may not even know the individual contracts to be awarded under the system. Furthermore the PIN or qualification system may relate to a number of contracts, some of which might be suitable for award using a procedure which involves an auction, while others may be unsuitable for award using the tool. As a result she

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suggests that the requirement imposes a stricter requirement upon utilities than was the case before the rules.

During the interviews, questions were used to explore participants' views of the requirement. Most participants stated that the provision only required them to do what they were doing and observed that it ensures openness and transparency. One entity remarked that its suppliers were more supportive of the auction where an intention to use the tool had been communicated to them. On the further issue of how utilities comply with the condition in award procedures advertised through a PIN or a qualification system, and any difficulties created by the requirement, the general comment from the utilities was that the requirement had not created any difficulties for them or affected their use of auctions. Participants remarked that this was because they adopt a standard practice of indicating that they may use the tool in every notice including all PIN notices and notices advertising a call for competition to the system.

3.4.2 Information required to be included in the specifications and the invitation to participate in the auction phase

Article 54(3) of the Public Sector Directive and Article 56(3) of the Utilities Directive require procuring entities to include certain information on auctions in the specifications and the invitation to participate in the auction. These include rules applicable to the auction such as information on those features, whose values will be the subject of auction phase, information about the electronic equipment to be used, and the arrangements and technical specifications for connection. Relevant information concerning connection to the electronic equipment, the date and start time of the auction, and the mathematical formula to be used to determine automatic rankings must also be furnished to auction participants.

During the interviews, questions were used to explore participants' opinions on the necessity or otherwise of these requirements. In their responses, many participants noted the utility of these provisions. However, some participants remarked that the requirements create more administrative work, than was the case before the rules. One service provider observed that the requirements could put procuring entities off using auctions as some entities view the requirements as requiring them to do additional work. He further submitted that the requirements should however be seen as best practice requirements for effective auctions. Another participant remarked that the obligation had introduced a check box approach to the procurement process and was concerned that the requirements could be extended to

contracts not under the coverage of the EU procurement directives (sub-threshold contracts) but for which a procuring entity elects to use an auction. His main concern arose from the fact that most contracts, for which its organisation had used an auction were below the threshold covered by the directives and he was concerned about the importation of the requirements to such contracts.

3.5. Findings on the rules governing the conduct of the auction process

One significant contribution made by the procurement directives is the inclusion of detailed rules which regulate, in particular, the running of the auction including on the pre-auction, actual auction and closing stages of the auction. These are contained in Article 54(2) – (8) of the Public Sector Directive and Article 56(2) – (8) of the Utilities Directive. The provisions require procuring entities to run the auction in accordance with information the specifications or in the invitation to participate in the electronic auction. Further provisions require the procuring entity to indicate in the specifications the features that will be subject to revision in the auction phase, to evaluate the tenders automatically using devices which collect and re-rank the bids without any subjective assessment or human intervention by the procuring entity, to continuously communicate to all tenderers sufficient information to enable them to ascertain their relative rankings at any moment and at the close of the auction to award the contract on the basis of the results from the auction. These provisions have been the subject of extensive analysis in the literature (Arrowsmith, 2005, pp. 1186-1207). In her criticism of the provisions on the conduct of auction, Arrowsmith argues that the provisions have effectively restricted entities from using an auction model in which when the auction closes, the outcome of the competition is not established – a model which was available to them before the rules.

During the interviews, participants were asked to comment on how the rules had affected their auction process. Most participants remarked that the rules had not introduced significantly different processes to their practices and that the provisions generally mirrored very closely the process adopted by them prior to the introduction of the rules. Specifically, one participant noted that the rules simply required its organisation to conduct a fairly standard EU compliant tendering process with an additional auction stage at the end. Many participants observed that the rules had made the assessment and evaluation phases more satisfactory to suppliers, as a result of requirements imposed on procuring entities to set out their evaluation criteria, including the weightings, a lot earlier than was the case before the rules. Such participants therefore viewed the rules as enhancing

transparency. They also commented that the rules support suppliers with greater opportunities to improve their tenders, since they were bidding in the competition with greater information. They noted further that the requirements had resolved some previous poor auction practice where suppliers were bidding without sufficient information on the rules applicable to the auction.

A few participants however identified two impacts arising from the provisions on the conduct of the auction process: that the rules had curbed their discretion to evaluate aspects of the tenders after the auction process, and that the rules introduced a requirement for ranking of bidders during the event.

On the first impact, the participants commented that before the rules there was some discretion regarding whether or not to undertake evaluation of tenders prior to, or after the auction event, but that following the rules, the position had now changed. Specifically, one utility remarked that the rules had introduced some practical changes to its use of an auction phase within the negotiated procedure. According to him, the main impact of the rules had been the removal of the flexibility previously available to his organisation when operating auctions under the negotiated procedure, whereby it could elect to evaluate aspects of the tender not revised during the auction, after the conduct of the auction event on price. The participant indicated that the e-auction rules force organisations down a particular route – to evaluate the tenders before the auction phase, which is unnecessarily rigid and curtails the flexibility ordinarily available when using the negotiated procedure. He argued for a position where in regulating auctions the EU's approach should have stated simply that entities are permitted to use auctions provided they are run on a non-discriminatory and transparent basis. Some other participants further commented that the inability to vary when to undertake the evaluation point had occasioned some difficulties in relation to the organisation of collaborative auctions.

On the second impact - the requirement for ranking of bidders - Article 54(6) of the Public Sector Directive and Article 56(6) of the Utilities Directive require the procuring entities to instantaneously communicate to all tenders sufficient information to enable them ascertain their relative rankings at any moment. Some participants mentioned that to ensure compliance with the requirement, they had to redesign their auction software. A few participants pointed out that the ranking requirement is not good auction practice in a restricted market with limited suppliers as it could serve to create opportunities for collusion, since in such markets economic operators are very likely to be aware of other operators in the competition which may result

in collusion by suppliers. These participants suggested that a better approach would have been for the rules to require that the auction process indicate to tenderers what the best/leading bid rather than the various rankings.

The above points are significant findings from the research as they reflect the major areas of criticisms of the EU e-auction rules and illustrate aspects of the rules which participants consider as being incompatible with good auction practice.

3.6 Findings on the rules on devices for conducting auctions

In relation to devices for conducting electronic auctions, Article 54(2) of the Public Sector Directive and Article 56(2) of the Utilities Directive specifically require that the devices should allow all tenderers to be simultaneously informed of relevant information including automatic ranking of the tenders. Other rules in the directives regulate such devices. Such rules include the provisions on communication contained in Article 42 of the Public Sector Directive and Article 48 of the Utilities Directive. These require *inter alia* that entities undertake communication, exchange and the storage of information in a manner that ensures integrity of data and preserves confidentiality. The provisions also control the tools used for electronic communication (such as the auction devices) and their technical characteristics, and require that these must be non-discriminatory, generally available and interoperable with the information and communication technology products in general use.¹⁰ Other controls on electronic communication tools and their technical details are contained in Annex X of the Public Sector Directive and Annex XXIV of the Utilities Directive.

During the interviews, questions were posed to participants in order to explore their views on these devices for running auctions. In particular, the questions sought to elicit any problem or challenge encountered in complying with the requirements. Responses on the issue were sparse as most participants from categories other than the auction service provider category declined to comment on the ground that, the issue was generally dealt with by the auction service providers. The general response from the auction service providers was that the rules had not altered the devices they use for running auctions for their clients. These participants further remarked the requirements in the rules on the auction devices were desirable and relevant for ensuring confidentiality of tenderers and safety in the conduct of auction events.

However, a utility which runs its own auctions in-house commented that it had to develop new software to comply with the requirement to provide information to tenderers on their ranking during the auction. The participants also noted that the rules which require the devices used for running the event to possess certain functionality, could lead to reliance on auction service providers, as its experience of amending software to comply with the rules was cumbersome. Another participant - a legal practitioner remarked that as new technologies emerge there could develop scenarios where the rules hamper opportunities to use emerging technologies, since the procurement rules often lag behind technological developments.

4. CONCLUSIONS AND LESSONS FOR US FEDERAL PROCUREMENT SYSTEM

As noted in the introduction, the research seeks to offer lessons for the future initiatives on e-auctions in the US federal procurement system.

One significant finding relates to the benefits of the e-auction rules. From the research, there is evidence to support the position that participants, including those who had not used auctions, view as positive the recognition of the tool in the directives. As indicated in section 3.1 above, the recognition has made users of EU procurement framework to consider the suitability or otherwise of the tool for their procurement. Evidence from the research also demonstrates that having formal rules on the tool has made suppliers more comfortable with its use. This finding is instructive for the US federal procurement system, as it is suggestive that the provision of formal e-auction rules has the potential to ensure greater acceptance of the tool by both procuring entities and suppliers. In the light of concerns about the disparities that the e-auction regulatory void has created, the provision of clear rules on the tool may provide an opportunity for reducing the hostility that US suppliers have against the tool, as such rules may be used to clearly delineate the conditions and circumstances when it is appropriate to use the tool.

Secondly, the findings from the research on the contents of the e-auction rules could provide some lessons for the US federal procurement system. This is because as demonstrated by the results in section 3 above, most users of the EU procurement framework in the United Kingdom view as satisfactory many aspects of the e-auction rules. It is also to be noted that that participants suggest that the rules have contributed to improvements in the way the tool is used and that they promote a more transparent approach in the use of e-auctions. Aspects of the rules identified as supportive of greater transparency and improvements in the conduct of auctions include:

provisions which require entities to declare an intention to use an auction; provisions which require entities to provide certain information on the auction to participants and the requirement to evaluate the tenders prior to the auction with the results from that evaluation being made available to the tenderers prior to the auction. The lesson to be drawn from these perceptions for US federal procurement law is that the satisfactory aspects of the EU auction rules can to some extent be used as a model for the contents of any regulatory initiative in the US on the tool. This is significant as one of the reasons which has been identified for the absence of regulation on the tool in the US federal procurement system, is the uncertainty among US government officials as to how to regulate auctions (Yukins 2009). Therefore US government officials can be assisted on how to regulate auctions by considering the perceptions on the contents of the EU e-auction rules.

A further lesson that can be drawn from the experiences with the e-auction rules relates to comments by some participants regarding the impacts of the e-auctions on the conduct of the auction process. Specifically, as discussed in section 3.5 the two significant impacts from the rules were that the provisions had curbed the discretion to evaluate aspects of the tenders after the auction process and had introduced a requirement for ranking of bidders during the event. Interestingly, Yukins' review of the US experience with auctions notes that US agencies in the absence of any regulation on the organisation of the auction process, use different models (Yukins, pp.476-478) including a model which allows entities to evaluate aspects of the tenders after the auction process, which runs contrary to basic principles of US procurement law. Consequently, the e-auction rules could provide some guidance on how the US federal procurement system may delimit the organisation of e-auctions in order to ensure that procuring entities only make recourse to auction models which comply with US procurement law.

Finally, it should be noted that, though the progress made by the US federal procurement system with e-auctions in the absence of formal rules on the tool is interesting, recent concerns surrounding the tool are indicative that some improvements are needed to secure the success of future e-auction events and their benefits. Accordingly, recourse could be made not only to the EU e-auction rules, but to rules on the tool in other procurement instruments with a view to identifying the rules most suitable for the US system.

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- ¹ The legality of using e-auctions is not in issue as the Federal Acquisition Regulations (FAR) no longer prohibits but in fact encourages innovative procurement techniques such as e-auctions. In addition, both GAO protests (MTB Group, Inc., B-295463, Royal Hawaiian Movers, Inc., B-288653 and Pacific Island Movers, B-287643.2) and the Court of Federal Claims (*MTB Group, Inc. v. United States*, 65 Fed. Cl.516, 525 (Fed. Cl. 2005) have upheld e-auctions in federal procurement.
 - ² Directive 2004/17 of the European Parliament and of the Council of March 31, 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors ("Utilities Directive") (2004) OJ L114/1; Directive 2004/18 of the European Parliament and of the Council of March 31, 2004 on the coordination of procedures for the award of procedures for the award of public works contracts, public supply contracts and public service contracts ("Public Sector Directive") (2004) OJ L134/114.
 - ³ Public Contracts Regulation 2006, S.I.2006/5; Utilities Contracts Regulation 2006, S.I.2006/6.
 - ⁴ Proposal for a Directive of the European Parliament and of the Council on Procurement by entities operating in the water, energy, transport and Postal Services Sectors COM (2011) 895 Final; Proposal for a Directive of the European Parliament and of the Council on Public Procurement COM (2011) 896 Final.

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- ⁵ Article 33 of the Proposal for a Directive of the European Parliament and of the Council on public procurement; Article 47 of the Proposal for a Directive of the European Parliament and of the Council on Procurement by entities operating in the water, energy, transport and Postal Services Sectors.
 - ⁶ On 30 March 2012, parties to the WTO Agreement on Government Procurement at a formal meeting of the committee adopted a decision on the outcomes of the negotiations under Article XXIV:7 of the Agreement on Government Procurement. This includes a Protocol and an Annex to the Protocol amending the GPA (GPA/113). The Annex contains provisions on e-auctions (Article XIV) modelled on the EU Procurement directives.
 - ⁷ On 1 July 2011, the revised UNCITRAL Model Law on Public procurement was adopted. The text contains detailed rules on e-auctions in Articles 3, and 53-57.
 - ⁸ The policy makers comprised an official from the Ministry of Defence (MOD), which is the body responsible for procurement policy in the defence sector and two officials from the Office of Government Commerce (OGC), which at the time of the research exercised overall responsibility for procurement policy for central government organisations. The OGC also provides advice on EU procurement rules for all procurement. In 2010, the OGC became part of the Efficiency and Reform Group of the Cabinet Office and is now responsible for supporting the procurement and acquisition process of public sector organisations in the United Kingdom through policy and process guidance and the negotiation of overarching service and provision frameworks. In addition to the MOD and the OGC, each of the nine Regional Centres of Procurement Excellence established to assist local authorities within the regions on certain functions including procurement was invited to participate in the research. Seven Centres represented by their strategic procurement officials participated in the research. In 2008, the centres were merged with their improvement counterparts and are now known as Regional Improvement and Efficiency Partnerships.
 - ⁹ Regulation 20 (13) of the Utilities Contracts Regulation.
 - ¹⁰ For extensive analysis, see Arrowsmith, 2005, pp. 1167- 1175; Bickerstaff (2009).