

The Use of Electronic Reverse Auctions in Public Procurement in South Africa

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1 INTRODUCTION

The use of electronic communications in the commercial world is ever expanding. Also in the field of public procurement, as is apparent from the United Nations Commission for International Trade Law's Model Law on Public Procurement of Goods, Construction, and Services (2011),¹ (hereafter referred to as the "Model Law"); the World Trade Organisation's Plurilateral Government Procurement Agreement,² (hereafter referred to as the GPA) and its revision;³ and the European Union Procurement Directives,⁴ the importance of electronic communication is internationally accepted.

A relatively new trend in public procurement is the use of electronic reverse auctions (hereafter referred to as ERAs).⁵ In a reverse auction, unlike a traditional auction that involves a single seller and many buyers, generally speaking, there is a single buyer and many suppliers. The buyer indicates its requirements, and suppliers progressively bid downwards. The lowest bidder wins the right to supply. Such reverse auctions are often conducted electronically.⁶

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¹ See http://www.uncitral.org/uncitral/en/uncitral_texts/procurement_infrastructure/2011Model.html (accessed 9-02-2012).

² See http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm10_e.htm#govt (accessed 15-04-2011).

³ Hereafter referred to as the "Revised GPA".

⁴ Art 1(6) of 2004/17/EC and art 1(7) of 2004/18/EC.

⁵ In the USA it has been in use since the mid nineties. Tully "The B2B tool that really is changing the world" 2000 *Fortune* 132; Eyo "The EC Rules on Electronic Auctions: Scope and Adequacy of the Rule" paper delivered at the 3rd PhD Public Procurement Conference, University of Nottingham (21-06-2007 – 22-06-2007). Text available at <http://www.nottingham.ac.uk/pprg/conferencesandevents/pastevents/phd-conference.aspx> (accessed 23-02-2011); See also Arrowsmith "Regulating of Electronic Reverse Auctions in Public Procurement Law" in Arrowsmith (ed) *Reform of the UNCITRAL Model Law on Public Procurement: Regulation for the 21st Century* (2009) 361-364.

⁶ For a general discussion of the different types of auctions that can be utilised, as well as a discussion of auction theory and its applicability to public procurement, see Soudry "Promoting Economy:

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The UNCITRAL Working Group I,⁷ as part of its work investigated the use of electronic reverse auctions in public procurement. Its work culminated towards the end of 2010 in a proposed new chapter for the Model Law, which specifically deals with ERAs. This was incorporated as chapter VI of the 2011 Model Law.⁸ The use of ERAs was also investigated by the drafters of the proposed Revised GPA,⁹ which specifically deals with ERAs in article XIV thereof.

In South Africa, the use of ERAs is not specifically dealt with in its public procurement regime.¹⁰ The Electronic Communication and Transactions Act¹¹ however provides for, amongst others, the promotion of e-government services and electronic communications and transactions with public and private bodies, institutions and citizens.¹² There is in principle no reason why ERAs cannot be used in public procurement in South Africa as long as the use thereof complies with the constitutional imperatives of fairness, equitability, transparency, competitiveness, and cost-effectiveness.¹³

The purpose of this study is to determine whether it is viable to use ERAs in public procurement in South Africa. In order to do so, I will deal with some definitions of electronic auctions, how ERAs work in practice, discuss some of the advantages and disadvantages of ERAs, deal with the basic requirements prescribed by the

Electronic Reverse Auctions Under The EC Directives On Public Procurement” 2004 *Journal of Public Procurement* 340.

⁷ UNCITRAL has six working groups to perform the substantive preparatory work on topics within the Commission’s programme of work. Each of the working groups is composed of all member States of the Commission. Working Group 1 deals with Public Procurement. See <http://www.uncitral.org/uncitral/en/about/methods.html> (accessed 15-04-2011).

⁸ At its 19th session, Working Group 1 agreed on the text for the new Model Law on Public Procurement. It is contained in the document A/CN.9/729/Add.1-8. This revised Model Law was accepted by the Commission at its 44th session (27-06-2011 - 8-07-2011). Available at http://www.uncitral.org/uncitral/en/uncitral_texts/procurement_infrastructure/2011Model.html (accessed 20-02-2012).

⁹ GPA/W/313.

¹⁰ Neither s 217 of the Constitution 1996, the Public Finance Management Act 1 of 1999, Local Government: Municipal Finance Management Act 56 of 2003 nor the Preferential Procurement Policy Framework Act 5 of 2000 refers to ERAs. The use of ERAs is, on the other hand, not specifically excluded by the mentioned legislation.

¹¹ 25 of 2002.

¹² “Transaction”, is defined in s 1 of the Act to include transactions of a commercial nature.

¹³ S 217(1) of the Constitution provides as follows: “When an organ of state in the national, provincial or local sphere of government, or any other institution identified in national legislation, contracts for goods or services, it must do so in accordance with a system which is fair, equitable, transparent, competitive, and cost effective.”

UNCITRAL Model Law on Public Procurement for the use of ERAs and thereafter discuss the possibility of using ERAs in the South African public procurement regime. Some comments will be made in conclusion.

2 DEFINITION OF ELECTRONIC REVERSE AUCTIONS AND HOW THEY WORK IN PRACTICE

The Revised General Procurement Agreement defines electronic auctions as follows:

“‘Electronic auction’ means an interactive process that involves the use of electronic means for the presentation by suppliers of either new prices, or new values for quantifiable non-price elements of the tender related to the evaluation criteria, or both, resulting in a ranking or re-ranking of tenders.”¹⁴

The European Union Procurement directives define it as follows:

“An ‘electronic auction’ is a repetitive process involving an electronic device for the presentation of new prices, revised downwards, and/or new values concerning certain elements of tenders, which occurs after an initial full evaluation of the tenders, enabling them to be ranked using automatic evaluation methods.”¹⁵

In the Model Law it is defined as follows:

“‘Electronic reverse auction’ means an online real-time purchasing technique utilized by the procuring entity to select the successful submission, which involves presentation by suppliers or contractors of successively lowered bids during a scheduled period of time and the automatic evaluation of bids.”¹⁶

Simply put this means that the procuring entity sets up an electronic site on the internet for the auction. Precise specifications of what is to be procured and what criteria tenderers must comply with are set out. Potential tenderers (that qualify to participate) then log into the site to participate in the auction. At the appointed time, the auction starts and tenderers put in their tenders electronically. The price of each

¹⁴ Art I(f).

¹⁵ Art1(6) of 2004/17/EC and article 1(7) of 2004/18/EC.

¹⁶ Art 2(d).

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 either be a determined time or after the expiry of a set time (say two minutes) after the last bid. If other criteria than price are specified, such criteria are also evaluated electronically by means of a mathematical formula. The result of each tender is also immediately and simultaneously available to all participants.¹⁷

Because of the nature of ERAs, they cannot be used for all types of procurement.¹⁸ The fact that the evaluation is done electronically is the biggest limitation of ERAs in that such evaluation can only be done by means of a mathematical formula. This means that only exact quantifiable criteria can be used in evaluating tenders electronically. In essence, two possibilities for ERAs exist. The first is an auction where price is the only determining factor and the second is where other criteria than price, which is quantifiable, are included in the auction.

Some flexibility is possible in electronic auctions. It can be a straightforward stand-alone electronic auction where the whole process, from the invitation to tender up to the award of the tender, is done electronically.¹⁹ A more flexible approach is also possible where it can also be used as one aspect of the standard or normal procurement procedures.²⁰ An example would be where potential tenderers are evaluated as to their ability to perform and then included on a list of suppliers. Only those tenderers on the list may then partake in the ERA.

¹⁷ Bruner and O'Connor *Bruner and O'Connor on Construction Law Database* (2004) updated January 2010 vol 2 Chapter 7 para 7:36.50 307 define ERAs as follows: "Online reverse auction is a real-time dynamic process between a buyer and a group of prequalified, invited sellers who compete online to provide goods or services pursuant to clearly defined scope, specifications, and terms and conditions. As with traditional procurement process, in which a buyer invites bidders to submit bids, an e-RA [online reverse auction] calls for a buyer to publish a request for quotation (RFQ) for specific goods or services, and several bidders are invited to respond. Under the traditional bidding process, upon receipt of the RFQ, each interested supplier submits its bid by hard copy, fax, or email. Under the e-RA process, the bidding, or 'auction', takes place live, in 'real time' via the Internet, at a predetermined date and time, with the invited bidders bidding against one another. With online bidding, bidders do not see what others are bidding during the auction but receive immediate feedback on competitiveness of their last bid and have the opportunity to lower their last bid if they choose."

¹⁸ See Yukins and Wallace *Public Procurement Law Review* (2005) 183 183-202.

¹⁹ This is the approach in Brazil. See Arrowsmith *Reform* 373.

²⁰ This flexible model is used in the UK and the EU. Arrowsmith *Reform* 373.

The preconditions for the successful use of ERAs are first and foremost that the product must be standardised or simple to specify.²¹ With regard to the tender process the specifications for the tender must be clear and precise,²² the criteria must be capable of being translated into numerical values,²³ the procuring entity must have the correct organisational infrastructure and expertise,²⁴ there must be proper and appropriate communication between the procuring entity and the suppliers²⁵ and costs must be able to be externally validated.²⁶

Certain economic preconditions must also exist. The most important are that price elasticity must exist and the purchase lots must be large enough and of sufficient value to enable suppliers to make a profit and to encourage participation.²⁷ There must also be enough qualified suppliers with spare capacity who will participate,²⁸ no constraints like long-term partnership must exist, and the procuring entity must be prepared to change suppliers and bear the possible costs of doing so.²⁹

3 THE ADVANTAGES AND DISADVANTAGES OF ERAs

3.1 Advantages

The two main potential benefits of the use of ERAs have been identified as a reduction in the price of the goods or services procured and secondly, the increase of

²¹ Shalev and Asbjornsen "Electronic Reverse Auctions and the Public Sector: Factors of Success" 2010 *Journal of Public Procurement* 428 443-444 and 447.

²² This entails a clear description of specifications, information, and conditions including those relating to quality, quantity, geographical conditions, transportation, lead times, and similar aspects. Smeltzer and Carr "Electronic reverse auctions: Promises, risks and conditions for success." 2003 *Industrial Marketing Management* 481 481-488.

²³ See Yukins and Wallace *Public Procurement Law Review* (2005) 183 183-202.

²⁴ Jones, Hackney and Irani *E-Government: An E-Reverse Auction Case Study*. Proceedings of European and Mediterranean Conference on Information Systems Polytechnic University of Valencia, Spain (24-06-2007).

²⁵ *Ibid.*

²⁶ *Ibid.*

²⁷ Charlesworth, Jeffery and Urwin "Electronic Reverse Auctions: Changing the Balance of Power from Suppliers to Buyers?" 2005 *ACIS 2005 Proceedings* Paper 38 available at <http://aisel.aisnet.org/acis2005/38>.

²⁸ Jones, Hackney and Irani, *E-Government: An E-Reverse Auction Case Study*. Proceedings of European and Mediterranean Conference on Information Systems, Polytechnic University of Valencia, Spain (insert day-06-2007).

²⁹ Charlesworth, Jeffery and Urwin, "Electronic Reverse Auctions: Changing the Balance of Power from Suppliers to Buyers?" 2005 *ACIS 2005 Proceedings* Paper 38 available at <http://aisel.aisnet.org/acis2005/38>.

efficiency and effectiveness of the process in that it leads to a reduction in the costs and the time scales of the procurement process.³⁰

Many other advantages exist. ERAs can improve transparency³¹ in the procurement process since information on successive results of evaluation of bids at every stage of the auction and the final result of the auction are made known to all tenderers instantaneously and simultaneously.³² This will improve the confidence of tenderers participating in the process that they will be treated fairly and that the results will not be compromised by undue influence of any of the role players. Because of the importance of specifications, it can lead to better planning and drafting of specifications and award criteria.³³ Furthermore, ERAs are characterised by an evaluation process that is fully automated or with limited human intervention and therefore can discourage abuse and corruption.³⁴ They can be less costly for both the procurement entity and the tenderers in that the process,³⁵ and if well structured, is more accessible, cheaper³⁶ and saves a lot of time.³⁷

³⁰ Jones, Hackney and Irani, *E-Government: An E-Reverse Auction Case Study*. Proceedings of European and Mediterranean Conference on Information Systems, Polytechnic University of Valencia, Spain (24-06-2007); Brandon-Jones "Improving E-procurement compliance: The role of user perceptions." *POMS 20th Annual Conference 2009 2*; Arrowsmith *The Law of Public and Utilities Procurement 2* ed (2005) 1180; Soudry 2004 *Journal of Public Procurement* 340 UNCITRAL Working Group 1 at their 14th session during 2008 as is contained in document A/CN.9/WG.I/WP.61 11; Arrowsmith *Reform* 364 -367.

³¹ Vlok "A Principles-Orientated Approach to Regulating Reverse Auctions" 2007 *Public Contract Law Journal* 127. He states applicable principles to be maximizing transparency, selecting an offerer who is expected to perform and to design a competition that can be won.

³² A/CN.9/WG.I/WP.61 11.

³³ Arrowsmith *Reform* 364-367. See also A/CN.9/WG.I/WP.61 11.

³⁴ A/CN.9/WG.I/WP.61 11.

³⁵ Jones, Hackney and Irani refer to reduced work in process; increased automation of processes; reduced paperwork and improved accuracy; elimination of tasks, reduced inventory, consolidated invoices and reduced transmission errors.

³⁶ According to Brandon-Jones "Improving E-procurement compliance: The role of user perceptions." *POMS 20th Annual Conference 2009 2* this includes the costs of supplier search and selection, processing the order requisition, authorisation, order generation, receipting, invoicing and payment.

³⁷ Eckhaus and Bates "The Battle against the Global Financial Crisis: The Case for the e-Reverse Auction" paper delivered at the 7th Inna-Le-Havre International Conference (2009) para 6 available at <http://www.univ-lehavre.fr/recherche/cerene/InternationalConference/pdf/papers/Eckhaus-Bates.pdf>; Eyo "The EC Rules on Electronic Auctions: Scope and Adequacy of the Rule" paper delivered at the 3rd PhD Public Procurement Conference, University of Nottingham (21-06-2007 – 22-06-2007). Text available at <http://www.nottingham.ac.uk/pprg/conferencesandevents/pastevents/phd-conference.aspx> (accessed 23-02-2010).

3 2 Disadvantages of ERAs

Save for the fact that because of the nature of ERAs, it has inherent limitations making it only suitable for the more simple types of procurement that can be precisely specified, it does have certain other disadvantages.³⁸ Because of the focus on price, non-price factors relevant to the procurement may be given insufficient attention.³⁹ Such factors may include aspects like delivery times, socio-economic considerations, experience of tenderers and similar aspects. ERAs could be used when inappropriate for the particular procurement and undue weight can be given to price, or price could be made the sole criteria when other criteria might be of equal importance. The danger exists that value for money is reduced because of a lack of consideration of such non-economic factors. Long-term relations with high quality suppliers may be damaged causing them to exit the market. Prices may be reduced at the cost of quality and performance in delivery. If the tender price is too low and no mechanism exists to verify the viability of the tender price, it can lead to the failure of the contract.⁴⁰ ERAs can lead to the use of a too formal and mechanistic approach to specifications that are

³⁸Working Group I (Procurement) 7th session, New York (4-04-2005 - 8-04-2005) A/CN.9/WG.I/WP.35 stated: "In some countries where ERAs have been introduced, concerns have been expressed that, at least for some types of procurement, ERAs seldom provide benefits comparable to currently-recognized selection procedures. For instance, it has been suggested that they: (a) do not guarantee the lowest responsible and responsive price and continued savings in subsequent ERAs; (b) have hidden costs that may negate any savings realized from the auction process itself; (c) may encourage imprudent bidding and thus create a higher risk of abnormally low bids; (d) do not adequately handle non-price factors, such as quality of performance and buyer-supplier relationships; (e) create conflict of interests in market players, such as software firms and 'market makers' or 'e-market operators'; (f) are more vulnerable than traditional bidding processes to collusive behaviour by bidders, especially in projects characterized by a small number of bidders, or in repeated bidding in which the same group of bidders participate; and (g) have negative effects on the market, including an anti-competitive impact and a negative impact on technical innovations and innovative practices."

³⁹ Arrowsmith *Reform* 367-371; Jones, Hackney and Irani, state that the use of ERAs could lead to poor sourcing decisions, poor buyer and supplier relationships, higher costs, less cooperative suppliers and longer delivery times.

⁴⁰ Eckhaus and Bates "The Battle against the Global Financial Crisis: The Case for the e-Reverse Auction" paper delivered at the 7th Ithaca-Le-Havre International Conference (2009) available at <http://www.univ-lehavre.fr/recherche/cerene/InternationalConference/pdf/papers/Eckhaus-Bates.pdf>. Para 6.2 states: "One of the most dominant ones is that the fear from buyers that suppliers who win contracts thanks to low bids would not be able to deliver on their promises due to lack of resources or capabilities. Another issue is the high switching costs, which include evaluating and training the supplier, and coordinating organizational information systems; these often deter buyers from contracting with alternative suppliers, cancelling out all e-RAs' strengths. As this tool is based on the internet, security measures must be taken to ensure the process; information security leaks may expose suppliers to passwords and identity theft, and reduce the trust in the medium, which is crucial to process success."

not necessarily appropriate for the particular procurement.⁴¹ Collusion between suppliers may be easier in the case of ERAs.⁴²

There might also be possible negative implications because of the outsourcing of decision making beyond government,⁴³ such as to-third-party software and service providers.⁴⁴ Procuring entities may have to incur overhead costs in training and facilitating tenderers who are not familiar with the process in bidding through electronic reverse auctions.⁴⁵ In the electronic auction environment, an actual risk of suppliers gaining unauthorised access to competitors' commercially sensitive information exists. All the above factors may negatively affect the confidence of tenderers to participate in ERAs.

Despite the possible disadvantages thereof, the use of ERAs in public procurement is increasing. Proper regulation thereof is therefore necessary to ensure the optimal use thereof and to minimise the possible negative effects it might have.

4 THE UNCITRAL MODEL LAW

4.1 Background

The UNCITRAL Model Law on the Procurement of Goods and Construction was adopted by the Commission in 1993⁴⁶ and the Model Law on Procurement of Goods and Construction and Services in 1994. This Model Law serves as a benchmark and template for the developing and reforming of regulatory systems for public procurement.⁴⁷

⁴¹ Yukins "A Case Study in Comparative procurement Law: Assessing UNCITRAL's lessons for US Procurement" 2006 *Public Contract Law Journal* 183 warns that an ERA can bind a procuring entity to one technical choice which might not be the optimal solution.

⁴² Ratterman "The Use of Net Based Reverse Auctions to Procure Construction" 2004 *The Construction Lawyer* 22. This is especially true in projects characterised by a small number of tenderers, or in repeated electronic auctions in which the same group of tenderers participate.

⁴³ In many instances, the procuring entity will not have the necessary information technology expertise to run an ERA and will have to outsource such function to the private sector.

⁴⁴ Working Group 1 stated that: "these agencies may represent and have access to both procuring entities and bidders, raising potential organizational conflicts that may pose a serious threat to competition." See A/CN.9/WG.I/WP.61 11 and 12.

⁴⁵ Working Group 1 also stated that: "as a result, the procuring entity may face additional costs arising from the use of electronic reverse auctions (opportunity costs such as those arising should suppliers or contractors abandon the government market if required to bid through electronic reverse auctions) and higher prices than those they would have obtained if other procurement techniques were used." See A/CN.9/WG.I/WP.61 12.

⁴⁶ At its 26th session.

⁴⁷ In the *Model Law on Procurement of Goods and Construction and Services 1994 Guide to Enactment* 4 it is stated that "Furthermore, the Model Law may help to remedy disadvantages that stem from the

A review of the text of the 1994 Model Law was initiated in 2004, in particular to bring the text up to date with the developments in electronic communication and the effect thereof on procurement. This review, which also included other aspects of the Model Law, culminated in the 2011 Model Law. At its 19th session during November 2010, Working Group 1 agreed on the text for the new Model Law on Public Procurement. This revised Model Law was accepted by the Commission at its 44th session during 27 June and 8 July 2011.⁴⁸ Chapter VI of the 2011 Model Law specifically deals with ERAs.

In the Model Law, ERAs are mentioned as a method in which procurement may be conducted.⁴⁹ ERAs may be used under the following prescribed conditions:⁵⁰ It must be feasible to formulate a detailed and precise description of the subject matter of the procurement; there must be a competitive market of suppliers or contractors anticipated to be qualified to participate in order to ensure effective competition; and the criteria to be used to determine the successful submission must be quantifiable and possible to be expressed in monetary terms. All of these requirements must be present for this method to be available.

This first condition does not limit the use of ERAs to specific kinds of procurement and it can also be used, for instance, for the procurement of services and construction.⁵¹ It does however limit the procurement to instances where it is possible to formulate a detailed and precise description of the subject matter.⁵² This condition implies that electronic reverse auctions are primarily intended to satisfy the need of a

fact that inadequate procurement legislation at the national level creates obstacles to international trade, a significant amount of which is linked to procurement. Disparities among and uncertainty about national legal regimes governing procurement may contribute to limiting the extent to which Governments can access the competitive price and quality benefits available through procurement on an international basis. At the same time, the ability and willingness of suppliers and contractors to sell to foreign Governments is hampered by the inadequate or divergent state of national procurement legislation in many countries⁷.

⁴⁸ See http://www.uncitral.org/uncitral/en/uncitral_texts/procurement_infrastructure/2011Model.html (accessed 20 Feb 2012).

⁴⁹ Model Law art 26(1)(i).

⁵⁰ Model Law art 30.

⁵¹ The Model Law refers to the “subject matter of the procurement” and does not distinguish between goods and services or construction as was the case with previous versions.

⁵² This first condition will preclude the use of this purchasing technique in the procurement of most services and construction, unless they are of a very simple nature.

procuring entity for standardised, simple, and generally available goods, services or construction, such as off-the-shelf products or commodities (e.g., stationary) or simple services or construction to be provided. In these types of procurement, the determining factor will be price or quantity and a complicated evaluation process will not be required. It is suitable where no post-acquisition costs are expected and no services or other inputs from the supplier are needed after completion of the procurement.⁵³

The purpose of the second condition is to ensure effective competition.⁵⁴ It will depend on the circumstances what the minimum number of participants needs to be to ensure effective competition. One of the major negative aspects in this regard is the possibility of collusion between tenderers, especially when the number of potential tenderers are limited and when the same tenderers regularly compete against each other.

The third condition implies that if other criteria than price need to be evaluated it must be possible to prescribe detailed and precise specifications for such criteria. In formulating detailed and precise specifications, procuring entities have to take special care to refer to objective technical and quality characteristics of the subject of procurement to ensure that tenderers will tender on a common basis. The criteria must also be transparently and objectively applied through a pre-disclosed procedure and mathematical formula. Procurement involving multiple variables and where qualitative factors, like the experience and qualifications of the tenderer, are decisive, should therefore not be subject to electronic reverse auctions. This condition further implies that the non-price criteria must be converted to price equivalents so that the ranking of tenders can be continuously and automatically evaluated and determined during the auction. Arrowsmith states that “quantifiable criteria” implies that such criteria must be possible to be applied without subjective input. It precludes the use of a points system for converting criteria to monetary equivalents.⁵⁵ It also precludes

⁵³ See in general Arrowsmith *Reform* 381-2.

⁵⁴ *Ibid* 386.

⁵⁵ Arrowsmith *Reform* 32-3 and Working Group 1 document A/CN.9/WG.I/WP.61 para 16 16.

criteria where the relevant features can be objectively identified but the monetary value awarded thereto can only be subjectively determined.⁵⁶

Provision is made for ERAs to be used as a stand-alone method⁵⁷ and for use in a phase in existing procurement methods.⁵⁸ In framework agreement procedures with second stage competition it may be used in the second stage as long as it is in accordance with the other provisions applicable to this method of procurement.⁵⁹

In chapter VI of the Model Law, detailed provisions are set out that have to be complied with during each stage of the procurement process when ERAs are used. Provision is made for the use of ERAs as a stand-alone method⁶⁰ and as a phase preceding the award of the procurement contract.⁶¹

4 2 Pre-auction provisions

The pre-auction requirements relate to a wide range of aspects. These include requirements with regard to the identity of the procuring entity⁶² and the tenderers, including their qualifications;⁶³ registration for the auction;⁶⁴ the terms and conditions of the procurement contract;⁶⁵ detail of the subject matter of the procurement, including the criteria, specifications, qualities and similar attributes it has to comply with;⁶⁶ the criteria, timeframes and procedures for the submission, evaluation and award of the tender;⁶⁷ the minimum number of potential tenderers required to participate and under what circumstances participation may be limited;⁶⁸ the means by which clarification can be sought;⁶⁹ the right to challenge decisions or actions by the

⁵⁶ Arrowsmith *Reform* 383. Arrowsmith uses the example of a monetary value subjectively awarded to low emissions in vehicles. Criteria that would be appropriate will be running and maintenance costs.

⁵⁷ Art 30(1).

⁵⁸ Art 30(2).

⁵⁹ Art 30(2).

⁶⁰ Art 53.

⁶¹ Art 54.

⁶² Art 53(1)(a).

⁶³ Art 53(1)(s) and art 53(1)(e).

⁶⁴ Art 55.

⁶⁵ Art 53(1)(c).

⁶⁶ Art 53(1)(b) read with art 10.

⁶⁷ Art 53(1)(f), (g), (h), (i), (j), (l), (m), (n), (o), (p), (r), (u) and (v).

⁶⁸ Art 53(1)(j), (k), and 53(2).

⁶⁹ Art 53(1)(r).

procuring authority;⁷⁰ and the formalities required for the contract to enter into force.⁷¹ Similar provisions apply in the case where ERAs are used as a phase preceding the award of the procurement.⁷² The purpose thereof is to ensure competition, a free flow of information, transparency, equality between suppliers in that everyone tender for the same subject matter on the same basis, fairness to all parties involved in the procurement and that the goal of value for money is achieved.

4 3 Requirements during the auction

The auction must be based on price, where the procurement contract is to be awarded to the lowest priced tender,⁷³ or on price and other criteria, where the procurement contract is to be awarded to the most advantageous tender.⁷⁴ Requirements that are pertinent to this type of procurement are provided for. All tenderers must have an equal and continuous opportunity to submit their tenders.⁷⁵ There must be an automatic evaluation of all tenders⁷⁶ and all bidders must receive, instantaneously and on a continuous basis during the auction, sufficient information to enable each tenderer to determine its tender as against the other tenderers.⁷⁷ There may be no communication between the procuring entity and the tenderers or amongst tenderers save as provided for in the Model Law.⁷⁸ The identity of any tenderer may not be disclosed during the auction.⁷⁹ The procuring entity must suspend or terminate the electronic reverse auction in the case of communication system failures that risk the proper conduct of the auction or for reasons stipulated in the rules for the conduct of the auction.⁸⁰

These provisions are devised in particular to ensure that the evaluation is done automatically, whilst enabling tenderers to lower their tenders in response to the other

⁷⁰ Art 53(1)(t).

⁷¹ Art 53(1)(u).

⁷² Art 54.

⁷³ Art 56(1)(a).

⁷⁴ Art 56(1)(b). Such criteria are those specified to tenderers under articles 53 and 54 of the Model Law.

⁷⁵ Art 56(2)(a).

⁷⁶ Art 56(2)(b). This must be done in accordance with the criteria, procedure and formula provided to tenderers in terms of articles 52 and 53.

⁷⁷ Art 56(2)(a) and (b).

⁷⁸ Art 56(2)(d). Save as provided for in art 56(2)(a) and (c).

⁷⁹ Art 56(3).

⁸⁰ Art 56(5). In such a case, the procuring entity may not disclose the identity of any tenderer.

tenders received and to minimize the possibility of collusion between tenderers or with the procuring entity.

4 4 Requirements after the conclusion of the electronic reverse auction

The requirements after the completion of the auction enable the procuring entity to ensure that the winning tender is responsive and that the tenderers comply with the prescribed qualifications.⁸¹ If the tender is unresponsive or the tenderer not qualified, the procuring entity may cancel the procurement or select the responsive tender, for which the tenderer is qualified, that was the next lowest priced or next most advantageous.⁸²

In the case where the successful tender appears to be abnormally low, or if the procuring entity is concerned with the tenderer's ability to perform, the tender may be rejected.⁸³ In such a case the next lowest priced or next most advantageous tender must be selected. Before a tender may be rejected, as set out above, the procuring entity must request in writing from the tenderer comments on the aspects that gives rise to the concerns as to the tenderer's ability to perform.⁸⁴ The procuring entity has to give reasons for its rejection and all communications with the tenderer must be included in the record of proceedings.⁸⁵

Generally speaking, in the Model Law the requirements applicable to ordinary procurement through competitive bidding are applicable to ERAs. Specific requirements⁸⁶ apposite to ERAs are however introduced in the Model Law. The purpose thereof is to ensure that the objectives of the Model Law, as set out in its preamble, are achieved also when ERAs are used. The importance of electronic communication also in public procurement will probably grow in future. It is necessary to keep abreast with new developments in this field and the proper regulation thereof must be welcomed. The provisions of the Model Law will in this

⁸¹ Art 57(2).

⁸² Art 57(2).

⁸³ Art 57(3).

⁸⁴ Art 20(1).

⁸⁵ Art 20(2).

⁸⁶ In particular chapter VI of the Model Law.

regard once again be a benchmark to be used by public procurement regimes that make use of ERAs.

5 THE USE OF ERAS IN SA

In terms of section 217 of the Constitution,⁸⁷ public procurement by organs of state in all spheres of government must take place in accordance with a system that is fair, equitable, transparent, competitive, and cost effective. To give effect to these constitutional requirements, framework legislation was enacted regulating public procurement.

The first Act is the Public Finance Management Act,⁸⁸ (hereafter the PFMA) which prescribes the general system for public procurement that must be followed by national and provincial governments, the public entities listed in Schedules 2 and 3 of the Act, constitutional institutions, Parliament, and provincial legislatures. The second Act is the Local Government: Municipal Finance Management Act,⁸⁹ (hereafter the MFMA) which regulates public procurement on local government level.⁹⁰

There are numerous other acts⁹¹ that either directly or indirectly deal with or have an influence on public procurement. They were not promulgated to exclusively regulate public procurement but rather to regulate other aspects of government administration.

In principle, the public procurement regime of South Africa does not exclude the use of ERAs. The Electronic Communications and Transaction Act⁹² indeed promotes e-government services and electronic communications and transactions with public and private bodies, institutions, and citizens. The regulations promulgated in terms of the

⁸⁷ S 217(1) provides: “(1) When an organ of state in the national, provincial or local sphere of government, or any other institution identified in national legislation, contracts for goods or services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost effective.”

⁸⁸ Act 1 of 1999.

⁸⁹ Act 56 of 2003.

⁹⁰ The Local Government: Municipal Systems Act 32 of 2000 provides for public/private partnership for the provision of services and service delivery agreements on local government level.

⁹¹ Examples are the Promotion of Access to Information Act 2 of 2000 and the Promotion of Administrative Justice Act 3 of 2003. The Preferential Procurement Policy Framework Act 5 of 2000 (hereafter referred to as the PPPFA) exclusively deals with public procurement but does not directly deal with ERAs.

⁹² Act 25 of 2002 s 291(g).

MFMA in fact allow the use of auctions as a method of procurement.⁹³ Although auctions are mentioned as a method of procurement in the PFMA, the MFMA and the regulations promulgated in terms thereof, they do not specifically regulate the use of ERAs. ERAs will in every instance it is used have to comply with the constitutional requirements of fairness, equitableness, transparency, competitiveness, and cost-effectiveness.

When considering whether ERAs should be used for a specific public procurement, the specific circumstances in South Africa need be taken into account. Not all suppliers or potential tenderers, especially the smaller ones, have access to reliable e-communication, especially in the more rural areas. Many of them also do not necessarily have the expertise or self-confidence to use e-communication and some do not trust it. In the case of small local government procurement entities, the possibility of collusion is real as the value of the contracts may limit participation to local suppliers who all know each other. ERAs need well-trained specialists in the specific field to properly draft specifications and to determine the value to be allocated thereto. It is doubtful whether all the smaller procurement entities do have such expertise. The use of consultants to manage ERAs on behalf of the procuring entity has inherent risks. In particular, if little capacity is available in the procuring entity it will make it vulnerable for abuse by consultants. All public procurement entities have their own procurement policies, which may lead to a duplication of resources and different specifications, standards and criteria when using ERAs. In low value procurement, the costs of consultants may not justify the outsourcing of this function. A substantial part of suppliers who do not have the necessary technology or expertise or self-confidence to partake in ERAs could be excluded from participating when using ERAs. They could quite often be people from the previously disadvantaged section of the population. Special measures will have to be taken to ensure that the Preferential Policy Framework Act⁹⁴ is implemented when using ERAs. This can be done by a system of pre-qualification and awarding the necessary preferential points⁹⁵

⁹³ S 112(a).

⁹⁴ Act 5 of 2000.

⁹⁵ The latest Preferential Procurement Regulations, published in GN R501 in GG 34350 of 8 June 2011, provides that for contracts above R1 000 000 a maximum of 10 preference points may be awarded for specific goals. The lowest acceptable tender is awarded 90 points for price. Contracts below R1 000 000 can be awarded a maximum of 20 preference points for a specific goal and 80 points for price. The lowest

beforehand to tenderers who wish to partake in a particular ERA. Such points can then be factored in when utilising the ERA.

The proper use of ERAs by larger procurement entities with the necessary expertise and infrastructure that do high value procurement may on the other hand lead to substantial savings. Such savings may relate to both the costs of the subject matter of the procurement and the costs and time relating to the procurement process itself.

The use of ERAs in public procurement in South Africa can be successful if National Treasury issues proper and detailed regulations that regulate which procuring entities may use ERAs for the acquisition of prescribed products, determine under which circumstances it may be used, prescribe the way in which it should be conducted, and provide the necessary software and training to the procuring entities and potential tenderers. The UNCITRAL Model Law is a good example of a regulatory framework within which ERAs can be used which should ensure that the general objectives of public procurement and the prescripts of section 217 of the Constitution are achieved.

6 CONCLUSION

The importance of electronic communication in public procurement should not be underestimated. Electronic commerce is steadily growing and its use will increase in future. The use of electronic auctions in the private sector is well established and the use thereof will probably increase with the increase in use of information technology. Although ERAs have their own inherent limitations, they can be successfully used for the procurement of standardised, simple, and generally available goods.⁹⁶

In principle, there exists no reason why electronic auctions should not be used in public procurement in South Africa.⁹⁷ It in fact has many advantages that will enhance

acceptable tender is awarded 80 points for price. Acceptable tenders that are higher in price must on a *pro rata* basis score fewer points. In reg 4 provision is made how to calculate the points awarded for the price of a specific tender. Further points are then awarded to a tenderer for attaining a certain Broad Based Black Economic Empowerment status level. It further provides for the possibility to evaluate tenders on functionality.

⁹⁶ Such goods would typically be off-the-shelf products like stationary, certain medicines or medical equipment like syringes, light bulbs and other high volume standardised mass produced goods.

⁹⁷ The following important prerequisites must be taken into account when considering the use of ERAs: The product must be standardised or simple to specify; the specifications for the tender must be clear and precise; the criteria must be capable of being translated into numerical values; price elasticity

the constitutional principles of fairness, equitability, transparency, competitiveness, and cost-effectiveness. The proper utilisation thereof can lead to substantial savings in costs and time for all parties to the auction. One of its attractions is that it could limit fraud and corruption, if properly used, as the auction takes place in a real-time setting with little or no human interference whilst the information is immediately available to all participating tenderers.

There are however potential disadvantages which should be limited and managed through proper regulation. In particular, the ease of use of ERAs may lead to the over utilisation thereof for procurement not really suited for ERAs. Procurement entities might not have the necessary capacity to ensure the proper use thereof and might be exposed to consultants who do not necessarily have the procuring entities' best interests at heart.

It will be to South Africa's advantage to adapt to international trends in e-procurement. It should however not be done indiscriminately but be incrementally implemented, within a proper regulatory framework, taking into account the specific challenges in the South African public procurement environment. For purposes hereof, the Model Law can be used as a template for National Treasury to develop regulations for the proper implementation of ERAs in public procurement in South Africa.

must exist and the purchase lots must be large enough and of sufficient value to enable suppliers to make a profit and to encourage participation; there must be enough qualified suppliers with spare capacity who will participate; the procuring entity must have the correct organisational infrastructure and expertise; there must be proper and appropriate communication between the procuring entity and the suppliers; costs must be able to be externally validated; no constraints like long-term partnership must exist; and the procuring entity must be prepared to change suppliers with the accompanying switching costs.