

**Reverse Auctions in The Public sector  
Emergence and Usage**

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# Electronic Reverse Auctions in Local Government

## Australia, the UK and the European Union

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Declaration of Interest: Trade Interchange is a specialist provider of reverse auction services in Australia and the UK.

### ***Introduction***

The ongoing drive to reduce costs and improve efficiency is felt most keenly in the procurement function. All guises of eProcurement are designed to deliver the sought after improvements. Reverse auctions are a strong contributor to the effort.

Over the past 5 years, reverse auctions have gained significant momentum and credibility in medium and large organisations in the US and Europe. This is due to the significant cost savings and other benefits that are regularly achieved. Whilst the commercial sector were the first to use them, they are now used broadly across all levels of the public sector. As an example, the results of the latest survey of UK local government showed that in 2005, 33% of councils were using reverse auctions.

Whilst the adoption of reverse auctions in Australia has been relatively low, the global momentum and success of this cost reducing method is having an impact. We are now seeing the first Australian government commitments to trial the approach.

This document sets out to support the introduction of reverse auctions into local government in Australia.

## A Brief Introduction to Reverse Auctions

In a reverse auction (RA) bids reduce in value as the auction progresses rather than increase as they do in a traditional auction. As the bidding is reversed, they are used by the buying entity for the purchase of goods and services. In it's simplest form, (optionally) the lowest bid wins the auction.

Reverse auctions have gained significant popularity in the US and Europe since their introduction in the late 1990's. They are used by procurement teams in medium and large organisations in both the public and private sectors. The primary benefit being achievement of best market prices in a fair and transparent way.

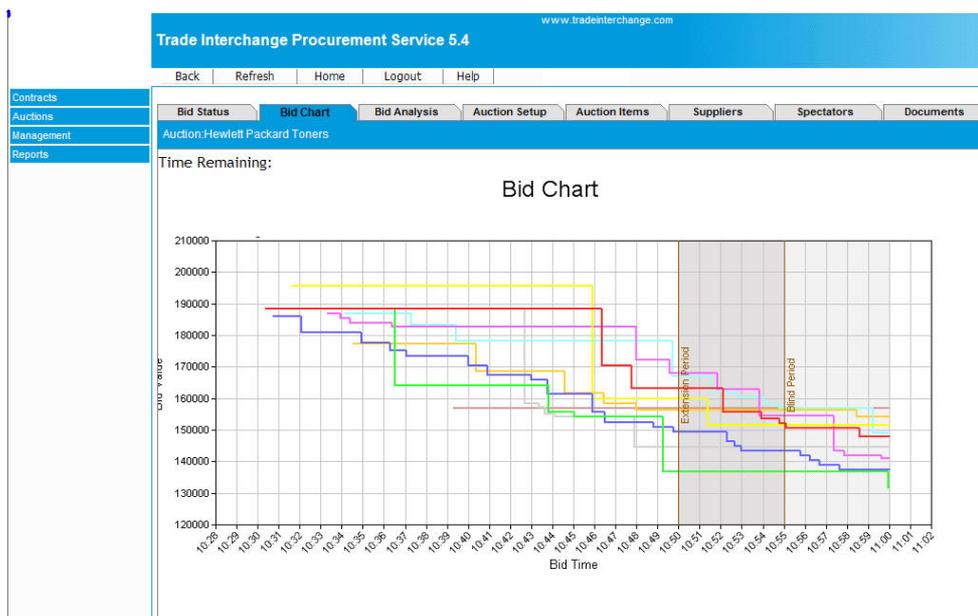
*'e-Auctions effectively allow for an infinite number of bid re-submissions by suppliers in an open and competitive environment, at a relatively low overhead cost. This turns the concept of a 'true market price' into a reality...'*

Source: What are e-Auctions... and how to get started. UK local government guide.

Sometimes known as e-auctions, reverse auctions are held on line in a password secured environment. They are accessible to pre-qualified suppliers only. Pre-qualification is achieved through established means such as Expression of Interest (EOI) or an existing panel of suppliers.

One of the most popular styles of reverse auction is called a 'positional auction'. In this type of auction a bidder will see only their ranking, or position, resulting from their current bid. If there are 4 bidders they will see that they are 1st, 2nd, 3rd or 4th. Bidders will then lower their bid in an effort to improve their ranking. Alternatively a 'price auction' can be used where bidders will also see the value of the leading bid.

This is an actual example of a bid chart (for printer toner cartridges) as seen during the auction by the buying organisation:



Each coloured line represents a bidding organisation.

A reverse auction is a tactical tool that is used at a single point towards the end of the procurement process. The established purchasing procedures do not change in any significant way. The reverse auction simply delivers the best price quotations. These are then ranked and incorporated with the value ratings to deliver the final Value for Money score.

A further element of reverse auctions is that they are less susceptible to claims of favouritism and breaches of probity. One reason is because all bids are recorded and cannot be modified. This provides an audit trail of prices offered that can be scrutinised at any time after the auction. Another reason is that during the auction the buying organisation is an observer and not a participant in the price 'negotiation' process.

## ***The Emergence of Reverse Auctions in Government Procurement***

During the late 1990s, at the height of the dot com boom, came trading hubs, or exchanges, and the emergence of electronic reverse auctions. Whilst many exchanges faltered, reverse auctions survived and grew strongly in the US private sector. In 2000, US public sector organisations began using the technique with the US Department of Defence being the most famous example due to its rapid and widespread scale of adoption. The way had been cleared for the use of traditional auctions in US public sector procurement through a major overhaul of federal legislation in 1997.

In March 2004 the EU released their Consolidated Procurement Directive. This directive was required to be incorporated into the laws of each member country by January 2006. Amongst other changes, this directive sanctioned the use of Reverse Auctions (RAs), or e-Auctions in EU speak, for the first time.

Prior to the release of this directive, the legal use of RAs in the EU was unclear. As an example, UK government agencies were wary of RAs for fear of breach of EU procurement directives. As the debate developed it became clear that RAs had the potential to provide the EU with significant benefits in terms of cost reduction, increased probity, transparency and efficiency.

As a result of this new directive, European public sector organisations can now choose one of two standard paths for price gathering; the traditional single price offer accompanying a tender response or a reverse auction.

Whilst many EU countries are using RAs for public sector purchasing, adoption and usage varies widely from country to country.

## **Reverse Auctions and Public Sector Procurement in NSW**

In many respects, a parallel can be drawn between the NSW Local Government Act and Regulations, and the prevailing EU procurement laws prior to March 2004. There is no explicit sanctioning of RAs and there is uncertainty as to their permitted use in local government.

Current NSW local government practice precludes further negotiation of prices once tenders have been received. Whilst this is not an explicit requirement of The NSW Local Government Act or Regulations, the practice has been adopted to ensure compliance with The Act and Regulations in terms of the probity and fairness requirements. Further direction appears in the May 2006 ICAC publication 'Guidelines for managing risks in direct negotiations':

*"...In addition, agencies should not coerce unsuccessful proponents into lowering prices, nor should they engage in bid-shopping, that is trading off the prices of one proponent against another...."*

Combined, these directives invoke justifiable caution when it comes to considering RAs as a price gathering technique. However, there are a number of avenues that can be explored and some indications of approval of their use.

In December 2006, the NSW Department of Commerce released a significant document entitled 'NSW Government Procurement Guidelines, Reverse Auctions'. The introduction to this 18 page document is as follows:

*"This guideline will assist NSW Government agencies use internet-based reverse auctions as a method of procurement. Electronic commerce has the potential to contribute significantly to the procurement process. Agencies are to adopt innovative procurement methods where these may achieve the best value for money, so long as the methods comply with the expectations and principles of the NSW Government procurement policies, relevant legislation, and are appropriate to the circumstances.*

*This guideline applies on a whole-of-government basis. It is the responsibility of individual agencies to develop detailed procedures, consistent with these guidelines, which reflect the agency's internal delegations, particular needs and circumstances...."*

Specifically, in relation to bid shopping, it says this:

*" Possible 'bid shopping'*

*Bid shopping is the trading off of different tenderers' prices against one another in an attempt to obtain lower prices. This is unacceptable in government procurement. The reverse auction process, which involves bidders progressively offering lower prices, may be mistaken for bid shopping.*

*However, in bid shopping it is typically the buyer who actively seeks a lower price from a supplier by privately revealing the price offered by another supplier, without the knowledge and consent of that supplier. In the reverse auction process, the bidding process is transparent. All participants are provided with, and have access to, the same information at the same time. Agencies must inform suppliers that the reverse auction process will be used."*

A further document released by the NSW Department of Commerce in December 2006, 'NSW Government Procurement Guidelines, Tendering Guidelines' includes the following:

*"6. Glossary of Terms*

*eAuctions*

*Electronic reverse auctions (eAuctions) are an innovative procurement technique that use secured Internet-based technology. The sense of competition is heightened as suppliers compete in real time by bidding lower as the auction unfolds. eAuctions offer efficient, open and fair negotiations as part of a full procurement process. This means that the time needed to carry out competitive negotiations are reduced as it starts at or near the market price. eAuctions may either be structured around lowest price or most economically advantageous tender. They have proved particularly successful when used with requirements that have clearly defined specifications and where there is a vibrant market. Initial price proposals are needed."*

There is one further area worth exploring in the NSW Local Government Act. The following extracts highlight the relevant clauses:

Division 1 Tendering

55 What are the requirements for tendering?

- (1) A council must invite tenders before entering into any of the following contracts:

.....

- (3) This section does not apply to the following contracts:

.....

- a contract for purchase or sale by a council at public auction

.....

When The NSW Local Government ACT was passed into law in 1993, electronic reverse auctions did not exist (the idea was born in General Electric in 1994 with commercial products appearing in the late 1990s) and were understandably not part of



the consideration in the development of this clause. However, a similar situation is true in the US public sector procurement laws of 1997 where language expressly prohibiting the use of 'auctions' was removed. This has been interpreted and tested as giving legal approval for the use of RAs in the US public sector.

## The Local Government Experience in the UK

*"The [UK] Regional Centres of Excellence Procurement Programme (RCEPP) aims to unlock many millions of pounds in local government efficiencies by transforming council procurement."*

*"...our research, the largest of its kind ever undertaken, is creating a national picture of local authority spending and price benchmarking. This has revealed huge variations in the amounts councils are being charged for the same items - up to a staggering 2000% in some cases. One council is paying twenty times more than another for exactly the same item."*

*"Variations as extreme as this are rare but significant variations are common, as our analysis is beginning to show. This illustrates that there is considerable potential for driving down the cost of many goods and services which local government routinely buys." RCEPP web site.*

In recognition of the importance of the use of reverse auctions, the UK Treasury Department's 'Office of Government Commerce' or OGC, has been a very strong lead advocate for the adoption of reverse auctions at all levels of government.

Published in August 2006 by the UK's Department for Communities and Local Government, 'Consolidating progress ... becoming more efficient: the National Procurement Strategy for Local Government - Two Years On' reports that 33% of UK local authorities were using reverse auctions in 2005, up from 13% in 2004.

### UK Local Government reverse auction examples

The following table is a representative (but by no means, comprehensive) summary of reverse auction activity in UK local authorities:

*Note: For ease of understanding, all monetary values have been converted to AUD at a rate of 2.5 AUD to 1 GBP.*

<b>Organisation</b>	<b>Items</b>	<b>Total Value</b>	<b>Annual Savings*</b>	<b>Comments</b>
West London Alliance	IT Hw & Sw	\$1.7M	18%	Led by London Boroughs of Hounslow and Harrow.
London Contract and Supplies Group and Surry CC	Stationery	\$7M	37%	Full case study included in compiled raw data booklet.  Pre auction tender with costs. Evaluated on service levels, ordering and delivery processes and invoicing prior to auction.

				<p>Council leader, Stephen Burke said: <i>"Collaboration in procurement has existed for sometime but e-auctions take it to a new level. E-auctions are an innovative way of driving down costs."</i></p> <p><i>"Procurement is a major area of expenditure for local authorities and savings like the one we have made today are fantastic."</i></p>
London Contract and Supplies Group and Surry CC	Electronic office supplies	\$7.5M	7%	Full case study included in compiled raw data booklet.
Birmingham City Council	Office Supplies	\$1.5M	59%	<p>Birmingham is the largest metropolitan authority in England.</p> <p>Mike Steele, Birmingham's principal procurement manager said: <i>"You have to make sure you pick the right commodities and services before you embark on a reverse auction. If you don't then you often see little effect. But if you do you can make spectacular savings."</i></p>
Northampton CC	Telecoms - Voice, Data and line rental	\$2.5M	49%	5 suppliers. 75 bids received during auction.
Solihull MBC	Telecoms - Voice calls and line rental	\$1.7M	25%	8 suppliers. Shortlisted to 3 post e-auction. Final decision made following presentation to council.
Wiltshire, Bath, Somerset	Agency Staff		\$5M	3 year contract saving \$15M.
17 South West Councils	Wheelie bins		\$1.5M	South West councils plans for 2007 e-auctions include: Personal protective equipment, printed materials, sheds / fencing, vehicle fuel and furniture.

				Hamid Kennedy, Programme Manager, South West Centre of Excellence: <i>"An e-auction provides organisations with an opportunity to work collaboratively and obtain a true market value on the goods and services they buy."</i>
5 South West authorities	Printer consumables, paper, stationery		\$1.9M	Julian Morley, Director, South West Centre of Excellence: <i>"E-auctions are playing an increasingly important role"... "...committed to supporting more e-auctions to help local authorities cut costs..."</i>
Nottingham CC	Laptops	\$400k	28%	2 year contract. 3 suppliers bidding.
East Midlands COE	Wheelie bins	\$5.6M	9%	Pre-auction tender delivered 5% savings. E-auction reduced this by a further 9% making a total saving of 14%.
East Midlands COE	IT Consumables	\$1.6M	20%	Pre-auction tender delivered 27% savings. E-auction reduced this by a further 15% making a total saving of 42%.
East Midlands COE	PCs, Screens, IT services	\$1M	30%	Auction was shown live to 200 conference delegates. 6 suppliers bidding.
East Lancashire	Printer cartridges	\$150k	25%	Plans for paper, protective clothing, janitorial supplies, office furniture and vehicle fuel.
Hyndburn, Pendle, Rossendale LCs	Stationery	\$56k	62%	Lorna Dobson, East Lancashire eProcurement Director: <i>"Reverse e-auctions are a dynamic</i>

				<i>process allowing us to purchase goods at extremely competitive prices, without compromising quality, and the Hyndburn event was a huge success."</i>
North West COE - 9 Councils	IT hardware	\$12.7M	36%	<p>36% saving is against pre-auction benchmarked pricing.</p> <p>Mike Foy, assistant chief executive at St Helen's commented: "<i>E-auctions have an important part to play in councils' procurement strategies, particularly where the commodities can be clearly specified at the outset.</i>"</p>
North West COE - 5 Councils	Stationery and IT consumables	\$40M	30% <sup>1</sup>	<p>Neil Hind, e-procurement programme manager with the North West Centre of Excellence said: "<i>E-auctions are more effective than the usual tendering process because they allow for prices to be pushed down further while still being able to maintain quality.</i>"</p>
North West COE - 3 Councils	Office furniture	\$15M	30% <sup>1</sup>	<p><sup>1</sup>: Average savings of 30% were made across the three highlighted North West COE reverse auctions.</p>
Cheltenham BC	CCTV maintenance	\$140k	30%	<p>Pre-auction tender delivered 20% savings. E-auction reduced this by a further 30% making a total saving of 50%. 6 bidding suppliers.</p> <p>Angela Cox, Cheltenham BC procurement officer said: "<i>We are getting the same level of service for a much better price thanks to this new approach. We have</i></p>

				<i>been very careful to specify the quality of the service and we know that we are now paying the best price."</i>
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\*Where contracts are for estimated annual purchases (eg stationary), councils have estimated savings accordingly.

### **Other commentary**

British Minister for Local Government, Phil Woolas: *"...However efficiency is not about making cuts, it is about working in smarter ways.*

*"For example, the first wave of national e-auctions, held in 2005/06, generated efficiency gains of almost £13 million, equivalent to an average saving of 27% on each contract. Approaches like this allow councils to provide better quality services at a lower cost." PublicTechnology.net 20th September 2006*

Datamonitor analyst Martin Atherton said: *" Online reverse auctions are a step up for local government procurement, because they remove the potential for favouritism. Now it is seen as a strategic discipline and it has to be tight to help meet government efficiency targets." Computing 3rd August 2006.*

Martin Scarfe, Director, Local eGovernment National Projects said: *"There is nothing particularly difficult about e-auctions. It is simply a change in how the final bids are received for the contracts that you are trying to work up."*

Final comment in London Borough of Newham Case study (See Appendix A):  
*' It leaves one question, which should be aimed at all local authorities....  
 "Why aren't auctions used more often when all the evidence suggests significant cash savings and other process advantages"... ?*

## ***Using Reverse Auctions***

Like all things, reverse auctions are not a panacea. There are many situations where reverse auctions would not be recommended. Further, whilst there can be cost or time savings in one area, there can be added costs or time in another area.

There are three important questions to help determine suitability for auction:

1. Can the supply be unambiguously specified?
2. Is there strong competition amongst suppliers?
3. Is the value of the contract high enough (usually >\$200k)?

If all three of these questions can be answered 'yes', then there is a good chance of a successful auction.

Contract specification work needs to be particularly rigorous when an auction is planned. This is to provide suppliers with clear requirements so that they can accurately calculate their costs and keep any 'safety margin' to a minimum. This means the specification work can take longer, however it can also help reduce costs as well as being good business practise.

Strong competition refers more to the intensity of competition between supplies rather than the quantity of suppliers. Whilst 4 or more suppliers is ideal, some of the most successful auctions resulted from having just 2 fiercely competitive organisations bidding.

The value of the contract needs to be high enough for it to be recognised as an important piece of business by the suppliers. This will encourage more suppliers to participate and the bidding will be stronger. Further, the savings made need to be large enough to easily cover the auction service provider fees.

### **Concerns**

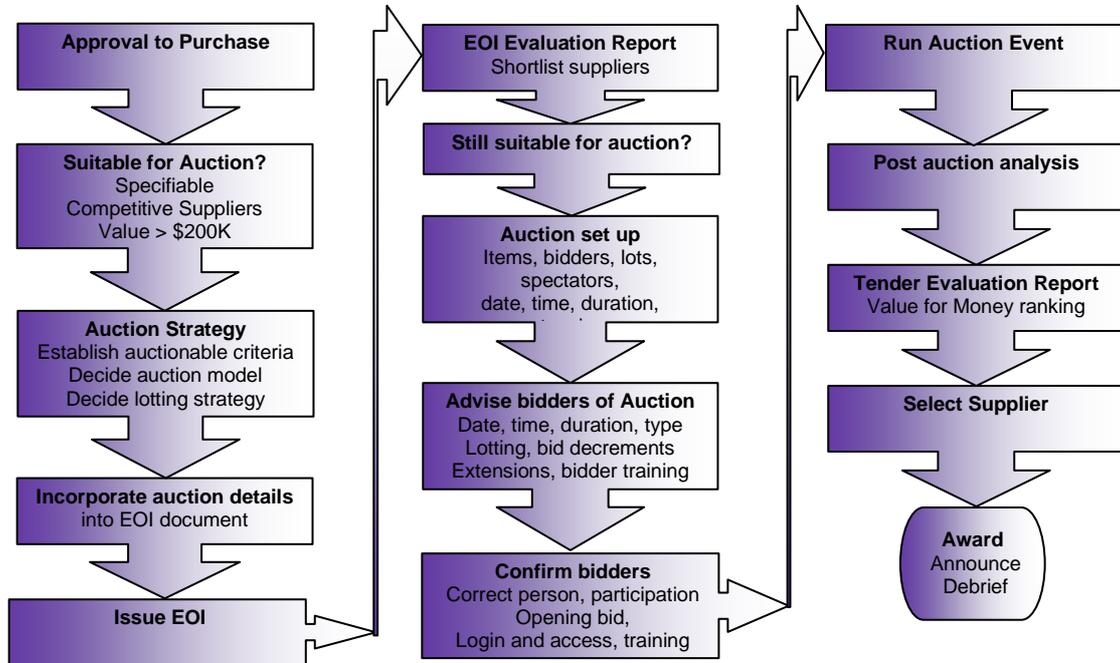
Reverse auctions can be daunting for both buyers and suppliers, especially first time round. Buyers can feel that the eyes of the organisation are on them. In some respects this is true as everything culminates in a short, intense period of activity which is referred to as an 'event'.

For suppliers, they are concerned that the process will result in unsustainable pricing due to the emotional nature of auctions.

These concerns are real but it must also be recognised that reverse auctions are simply a practical, efficient and transparent price negotiation tool where the market decides the ultimate price. A well specified contract and a properly planned auction will have an excellent chance of success.

## Process

Established procurement policies and processes are largely unaffected by the introduction of reverse auctions. Securing budget, analysing data, producing specifications etc all have to be carried out as normal. The reverse auction is a relatively short part of the exercise:



## Appendix A

### Extract from e-auction case study produced by London Borough of Newham.

In writing a case study of their reverse auction experience, the London Borough of Newham undertook some research to better understand the potential of reverse auctions in government purchasing. The following table is the result of their research:

*Note: The auctions shown in this table were conducted by all levels of government. All amounts are in pounds sterling. This table is copyright of the London Borough of Newham.*

<b>Commodity/Services/Good</b>	<b>Value of Contract</b>	<b>Savings Achieved</b>	<b>Saving (%)</b>
Computers	140,000	21,000	15%
Paper	52,000	9,400	18%
Bottled Water	450,000	260,000	58%
Electricity	1,152,000	99,000	9%
Gas	200,000	26,000	13%
Paper & Paper Board	450,000	72,000	16%
IT Equipment	40,000,000	12,700,000	32%
Medical Products	6,000,000	600,000	10%
Pharmaceutical Products	5,333,000	640,000	12%
Stationery	1,886,000	1,000,000	53%
Computers	1,400,000	400,000	29%
Court Reporting & Transcription Services	10,000,000	1,000,000	10%
Electricity	615,500	61,000	10%
Carrier Bags	788,000	248,000	31%
Stationery	465,000	269,000	58%
Pest Control	70,000	41,000	59%

Agency Staff	3,000,000	1,170,000	39%
Bulk Envelopes	713,500	85,600	12%
Car & Commercial Vehicle Hire	2,500,000	195,000	8%
Car Hire	750,000	195,000	26%
Carpet Tiles	1,225,000	355,300	29%
Construction Service (x10 Auctions)	76,000,000	12,160,000	16%
Contingent Labour (x6 Auctions)	84,000,000	12,600,000	15%
Architectural design & drawing services (x3 Auctions)	6,000,000	300,000	5%
Electrical cabling & install (x4 Auctions)	10,800,000	1,404,000	13%
Electricity	6,700,000	1,474,000	22%
Envelopes	1,185,000	118,500	10%
Mailing & Distribution	3,413,800	409,700	12%
Hotel Accommodation (UK)	8,000,000	880,000	11%
IT Recruitment	1,000,000	500,000	50%
Logistics	1,458,000	116,600	8%
Mobile Telephony	15,100,000	3,020,000	20%
Oils & Lubricants	612,000	79,600	13%
Statements & Letters	1,290,000	309,600	24%
Office Supplies	3,100,000	1,023,000	33%
Temporary Building Hire	3,284,000	755,300	23%
Major Electrical Components	500,000	75,000	15%
Cleaning Services	600,000	150,000	25%
Fleet – Leased Cars	5,000,000	500,000	10%

Hotel Accommodation	3,500,000	980,000	28%
Telecommunications – Outbound telephony	1,000,000	350,000	35%
Temporary Staff	6,000,000	1,200,000	20%
Mobile Telephony	656,000	225,000	34%
Inland Revenue Flat Screen Monitors	8,000,000	1,800,000	23%
Environment Agency Stationery	963,195	200,000	23%
NHS PASA Canned Grapefruit	143,413	30,000	24%
Inland Revenue Furniture	24,000,000	5,500,000	23%
<b>Total</b>	<b>349,807,312</b>	<b>64,007,600</b>	<b>18.30%</b>