



## E-SOURCING (ELECTRONIC SOURCING) – ESSENTIAL ELEMENT OF E-COMMERCE (ELECTRONIC COMMERCE)

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**Abstract:** Nowadays, in the age of digitalization and globalization, eSourcing (electronic sourcing) is not only a competitive advantage anymore but it is becoming an essential and irreplaceable element of each company's procurement strategy. As an important part of eProcurement (electronic procurement), eSourcing represents one of the key elements of modern and successful eCommerce.

**Keywords:** eSourcing, eProcurement, Digitalization

### WHY eSourcing?

The new trends like Industry 4.0 and digitalization are bringing new challenges to all markets and the business world changes dramatically and still faster. It becomes more and more difficult to stay competitive or even rise own competitiveness.

eSourcing considers all these elements and allows companies react accordingly and in the right way in order to keep or even strengthen own cost positions and through that their market position.

### WHAT is eSourcing?

The expression eSourcing stays for electronic sourcing. This type of process involves the use of web-based application to execute the buyer or seller procurement procedure. The main aim of eSourcing activities is to use online platform to increase and boost competition, bring greater efficiencies, transparency and better communication to the tendering process.

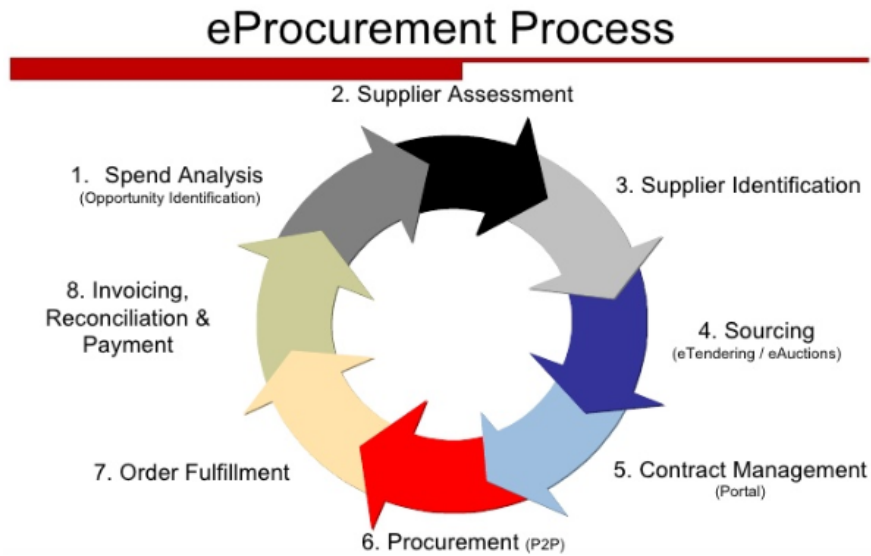
Simply explained, Sourcing, as a business process in procurement area, is a goal-oriented, with the company's purchasing strategy agreed, methodical decision-making process...When this process is carried out and supported with for that suitable software solutions - it is called "eSourcing". [1]

From Supply Chain Management point of view eSourcing represents an overall term for electronic request (eRfX) and electronic auctions / biddings (eAuctions / eBiddings). This improved and accelerated procurement process offers significant benefits for buyers and suppliers. eSourcing requires the provision of specific software and services which support the sourcing process electronically.

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**Picture 1** Position of eSourcing within eProcurement [Source 2]

In general, it is possible to distinguish between electronic requests (eRfX) and electronic auctions and biddings (eAuctions, eBiddings). They have their fixed and significant place within strategic (e)Procurement process, see Picture 1. A practical example based on Siemens AG processes is stated on Picture 2.



**Picture 2** Position of eSourcing within eProcurement at Siemens AG [Source 3]

## 1. Electronic requests (eRfX)

The eRfX is used to provide and collect various information from multiple relevant and for the respective case selected suppliers based on clearly pre-defined tendering structures. Procurement employees (mostly the role of strategic buyers) benefit from the comparability and analysis options of the submitted information and data, as tendering structure and response formats can be explicitly pre-defined by the strategic buyers.

eRfX is a collective term for the following eRfX types:

- Electronic Request for Information (eRfI)
- Electronic Request for Proposal (eRfP)
- Electronic Request for Quotation (eRfQ)

## 2. Electronic auctions / biddings (eAuctions / eBiddings)

An electronic auction / bidding is an e-business (negotiation) between auctioneers and bidders, which takes place on an electronic marketplace. eAuctions and eBiddings support strategic and project procurement specialist in a variety of tenders and price negotiations. Suppliers' bids are automatically processed by a support of a web-based platform, automatically compared with each other, then finally the suppliers are informed about the outcome.

eAuction:

- represents a type of electronic negotiation with consideration of Total Cost perspective (TOCO)
- provides some awarding commitment pre-defined by eAgreement (negotiation contract)
- ensures direct awarding
- the result determines the winner of the event (and the pre-defined business / projects)

eBidding:

- represents a type of electronic negotiation with consideration of Total Cost perspective (TOCO)
- provides some awarding commitment pre-defined by eAgreement (negotiation contract)
- ensures no direct awarding
- the result determines participants shortlisting (definition of participants which are part of a follow-up negotiation and/or awarding process)

### **eAuctions / eBiddings are supported by multiple formats**

The eSourcing itself offers due to various eAuction / eBidding formats multiple possibilities how to create and adapt the right sourcing / negotiation strategy in order to maximize tender / project outcomes (e.g. savings, selection of the best performing suppliers, ...).

**Selection of the suitable format and appropriate parameters has a crucial impact on the results of an eAuction / eBidding.**

Picture 3 shows the most common eAuctions / eBiddings formats used within Supply Chain Management:

eAuctions / eBiddings formats	Description
Sealed Bid	<ul style="list-style-type: none"> <li>• decreasing</li> <li>• every supplier submits a single final bid in a concealed manner</li> </ul>
Dutch	<ul style="list-style-type: none"> <li>• increasing price steps</li> <li>• suppliers are able to accept a certain price step</li> </ul>
English Decreasing Bids	<ul style="list-style-type: none"> <li>• dynamic quoting</li> <li>• suppliers need to underbid the current best bid in the eEvent to place a bid</li> </ul>
English Open Bids	<ul style="list-style-type: none"> <li>• dynamic quoting</li> <li>• suppliers need to underbid their own best bid in the eEvent to place a bid</li> </ul>
English Ticker	<ul style="list-style-type: none"> <li>• decreasing price steps</li> <li>• suppliers need to accept every price step to remain in the eEvent for submitting further bids</li> </ul>

Picture 3 Most common eAuctions / eBiddings formats [Source: authors]

### Most important pre-conditions of a successful eSourcing event

To ensure efficient, effective and successful execution of eEvents (electronic event) with outstanding results, following elements are to be prepared / considered:

- Appropriate training:
  - Training of procurement employees (strategic buyers and / or cross-functions) is necessary, in order to ensure a common understanding of the eSourcing methodology in general as well as the individual parameters for a respective tender (eEvent)
  - Training of involved suppliers, in order to make sure that they understand all pre-defined tender (eEvent) rules and are able to operate respective eSourcing tool, so that they can participate on organized eEvent (eAuction / eBidding)
- eAuction/eBidding service is handled by a neutral service provider in order to ensure full independency and transparency as well as support in case of “emergency” scenarios during live eEvents.
- eAgreement –clear definition of negotiation and awarding rules (to be signed prior to eEvent by all involved parts)
- Selection and definition of suitable eEvent format and respective detailed parameters
- Selection of an appropriate eSourcing tool – that allows set up of the respective eEvent format and negotiation parameters
- Further important frame conditions: consideration of market situation, business constraints, number of participants, competition between participants, TOCO perspective, commitment level.

### **Main advantages of eSourcing**

A goal-oriented use of eSourcing activities offers to private as well as public sector various benefits:

- saves time and cost
- improves compliance and reduces risk
- ensures a structured and complaint awarding process and supports awarding decision under consideration of total cost aspects
- increases the efficiency and effectiveness of price negotiations
- leads to process improvements and significant savings on material costs side
- allows immediate processing of the data
- ensures applying of project-specific needs and awarding rules

### **Final evaluation**

eSourcing activities provide support not only to procurement experts (strategic and / or project buyers) on an individual level in a wide variety of tenders and price negotiations but also to the whole organizations from a global perspective. The appropriate use allows significant increase of competition, efficiency and effectiveness, lead to process improvements and secure with that higher savings on direct and indirect cost, selection of best performing suppliers, negotiations can be shortened and result immediately processed and published. Transparency and compliance are ensured and maximal outcome generated.

eSourcing helps companies to react and adapt to the new trends like globalization, Industry 4.0 and digitalization and stay competitive also under consideration of fast changing environment and to that related circumstances.

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