

Reverse Auction: Price Determination in the Inverse Bidding Procedure

The reverse auction is an e-auction procedure in which suppliers bid downwards on the price for a defined scope of services in a competitive online process. For industrial buyers, it is an effective instrument for determining market-appropriate prices and objectively exploiting negotiation scope. Success and acceptance depend decisively on sound preparation, clear award rules and realistic framework conditions.

Key facts

- In a reverse auction, suppliers bid downwards against the price; the best bidder typically receives the award.
- Its use is recommended above all for standardised, unambiguously specified goods and services with several qualified bidders.
- Typical auction durations in practice are 30 to 60 minutes, often with dynamic extension phases.
- Key success factors are a precise requirements specification and a neutral, comprehensible award criterion.
- Low bidder numbers or complex service descriptions significantly reduce price competition and argue more for classic negotiations.

Definition: Reverse auction

The reverse auction is a digitally efficient procurement procedure in which procurement follows an inverted auction mechanism: instead of bidders bidding upwards, several admitted suppliers progressively reduce their offer price within a defined time window. The award is usually made to the most economical bidder according to criteria published in advance.

Distinction from classic negotiation

Unlike a bilateral negotiation, the price is generated in live competition among providers, without the buyer having to negotiate individually. In practice, the reverse auction therefore often replaces the second and third award rounds of an RFQ. However, it is no substitute for substantive evaluation: quality, capacities and logistics capability must be verified before the auction, for example through structured supplier auditing.

Variants of the procedure

In practice, several auction types have become established. The buyer selects the format according to market structure and objectives.

Legal classification

In the private sector, the reverse auction is in principle freely designable; what matters is that the rules of the game are transparent in advance. For public tenders, procurement law and competition law

impose stricter requirements, in particular on equal treatment and documentation. Details should be legally examined on a case-by-case basis.

Methods and procedure for execution

A successful reverse auction follows a structured process from demand clarification to award. Mistakes in preparation can hardly be corrected during the auction and frequently lead to unclear award situations or follow-up negotiations.

Preparation and specification

The basis is an unambiguous technical specification, defined quantities and fixed delivery terms. Based on the demand notification from the specialist departments and a reliable volume plan – for example from framework agreements or annual call-off data – the volume is aggregated. Unclear or changeable requirements disqualify the process, as providers price their risk into the offer.

Selection of bidders and information

Only qualified, pre-certified suppliers should be admitted; in practice the number is frequently between four and eight bidders. Before the auction, all participants receive the same documents, a trial access to the platform and clear rules on minimum bid increments, extensions and award criteria. Reference prices or a target curve can serve as guidance.

Auction process

During the auction, bidders typically see their own rank or the current best price – not the identity of their competitors. Bids are made in defined increments; the duration is frequently extended automatically if bids are still submitted shortly before the end. After the auction, the offers are evaluated, the award note with justification of the award decision is drawn up and the contract is placed.

Auction types: ranked, Dutch and more

The choice of auction format determines the behaviour and outcome of the competition. The buyer should adapt the format to the market situation, the number of providers and the target.

Ranked auction and rank-only auction

In a ranked auction, each bidder sees only their own rank, not necessarily the leader's price. This sustains the price competition over a long period without immediately disclosing the lowest price. In the rank-only variant, only the rank is displayed, which has proven effective when providers do not wish to reveal their price level prematurely.

Dutch reverse auction and transformation

In a Dutch reverse auction, the buyer starts with a high price which falls in fixed increments; the first provider to accept the current price receives the award. In a transformation auction, additional non-price parameters – such as volumes, durations or delivery locations – are exchanged to arrive at market-appropriate overall packages. These formats are suitable for more complex goods, provided the specification remains unambiguous.

Volume allocation in multi-sourcing

If the volume is to be split across several suppliers, auctions with lot sizes or proportional volume

allocation can be used. Combinations with volume-tiered prices or price indexation make the procedure suitable for volatile commodity markets. Price escalation clauses can also be defined in advance to make long-term framework agreements auction-ready.

Key KPIs for measuring success

The success of a reverse auction can only be assessed if baseline values and results are measured cleanly. These KPIs have become established in procurement practice.

Savings and savings forecast

The key metric is the saving compared with the baseline – typically the best offer before the auction. In practice, auction savings are frequently in the range of 5 to 15 per cent compared with the reference price, strongly dependent on the market situation and preparation. The savings forecast should define a realistic target range before the auction, against which performance is subsequently evaluated.

Process and competition metrics

In addition to the savings, the number of active bidders, the bid frequency and the proportion of the duration with active competition count. A low share of participating bidders or an early lull in competition signal problems with the specification, the market price level or bidder motivation.

Risks and controls

Reverse auctions carry economic, legal and relationship-related risks. Without suitable control mechanisms, additional costs often arise after the auction which erode the savings.

Quality risks and price pressure

Aggressive price pressure can tempt providers to cut back on scope of services, material quality or service. Countermeasures include binding specifications, quality requirements such as REACH conformity or certificates, as well as evidence such as the PPWR declaration of conformity where applicable. After the award, ongoing safeguards – such as a bank guarantee/guarantor surety for advance payments or contractual penalties – belong in the draft contract.

Collusion and market failures

With few participants, there is a risk of collusion or price coordination. The buyer should document anomalies, promote bidder rotation and have compliance violations uncovered through established channels such as whistleblowing systems. Restricted bidder lists can also easily breach competition law principles of equal treatment.

Supplier relationships and sustainability

Incumbent suppliers who are replaced by an auction without a fair chance often respond with reluctance to invest. A structured supplier evaluation including sustainability-related aspects such as a child labour risk assessment should take place before bidder selection. Missing sustainability- or compliance-related exclusions can hardly be remedied afterwards.

Contractual and documentary safeguards

Award criteria, rules of the game and the result must be documented – ideally in the award note with date, participants and justification. Key contractual terms such as price escalation clauses, price

indexation or automatic contract extension should be defined before the auction so that they do not become the subject of follow-up negotiations.

Current developments and digitalisation

Reverse auctions are now an established part of digital procurement strategies and closely interlinked with other e-procurement modules. The trend is towards integrated, data-driven procedures.

Integration into P2P and sourcing processes

Modern purchase-to-pay systems connect the auction phase seamlessly with subsequent order placement and invoice processing. The award flows directly into purchase orders and contract management, reducing manual interfaces. Procurement controlling draws on the auction data to evidence savings and continuously update the savings forecast.

AI-supported preparation

Analytics tools and AI assistants today help to identify suitable auction candidates from the spend data, derive reference prices and prepare bidder profiles. Market monitoring and price indices increasingly draw on external data sources and improve the realism of target prices. Inventory health dashboard data, for example, can indicate whether a volume is needed at all on this scale.

Sustainability and compliance in the bidding procedure

Increasingly, ESG criteria are being included as assessment-relevant factors alongside price in the award criterion. Approaches to child labour risk assessment or supply chain due diligence are being integrated into bidder qualification. This shifts the focus from pure price competition towards an overall competition across cost, risk and compliance.

Typical metrics

Savings vs. reference price: 5–15%

typical benchmark with sufficient bidder competition

Number of qualified bidders: ≥ 4

below this, competition is usually too weak

Auction cycle time: 30–60 min.

typical duration incl. extension phases

Practical example: E-auction for purchased parts in mechanical engineering

A medium-sized mechanical engineering company with around 350 employees wanted to consolidate its volume for standardised turned parts. To date, production cells had sourced the parts from several distributors at varying prices. Procurement aggregated the annual volume, defined a uniform specification and invited five qualified suppliers to a ranked reverse auction. Prior to the auction, technical approvals and delivery logistics were verified; the auction itself lasted 45 minutes with two extension phases.

- Consolidation of the annual call-off volume from three plants into a single auction lot
- Pre-qualification of bidders including capacity and certification evidence

- Ranked format with 1% bid increments and dynamic extension
- Framework agreement with volume tiers and price indexation concluded after the auction

Conclusion

The reverse auction is an effective instrument for objective price determination that can efficiently replace classic negotiations in defined segments. The prerequisite is sound preparation: unambiguous specifications, a sufficient number of qualified bidders and transparent rules of the game. Those who understand the auction as part of an integrated sourcing process – with subsequent documentation, contractual safeguards and supplier care – achieve sustainable savings without quality or relationship risks. For complex or strategically relevant services, classic negotiation usually remains superior. Targeted, disciplined use determines success.

Frequently asked questions

What is a reverse auction?

A reverse auction is an e-auction procedure in which suppliers submit descending bids on the price for a defined scope of services within a defined time window. The award typically goes to the most economical bidder according to criteria published in advance. It is frequently used as the final stage of an RFQ process in industrial procurement.

When is a reverse auction suitable?

Suitable candidates are standardised, unambiguously specified goods and services with several qualified providers and sufficient competitive pressure. Complex, creative or strategically relevant services, low numbers of bidders or unclear specifications are unfavourable. The market situation should be analysed in advance so that the price competition does not remain fictitious.

How does a reverse auction work?

After preparation – specification, selection of bidders, briefing session – suppliers submit progressively lower bids on an online platform. The duration is frequently extended automatically when new bids are submitted near the end. This is followed by evaluation of the offers, the award note and contract placement.

How much can you save with a reverse auction?

In practice, savings of approximately 5 to 15 per cent are achieved compared with the best pre-auction offer. The actual amount depends heavily on the market situation, the number of active bidders and the quality of the preparation. A realistic savings forecast before the auction helps to evaluate target values and success.

What is the difference between a reverse auction and a classic tender?

In a classic tender, bidders submit an offer once, which the buyer then evaluates. In a reverse auction, providers compete in a live procedure through progressive price reductions. The final price is thus generated dynamically from the competition, rather than from one-off written offers.

Are reverse auctions legally sound?

In private-sector procurement, reverse auctions are generally permissible provided the rules of the game are transparent in advance and bidders are treated equally. In public procurement law, stricter requirements apply to the procedure and documentation. Competition law aspects – such as collusion

or discriminatory selection of bidders – must always be observed; details should be examined on a case-by-case basis.