



Chapter highlights

- **Purpose:** This chapter covers the process for determining a fair and reasonable price related to information technology (IT) procurements.
- **Key points:**
 - All IT procurement professionals have a fiduciary responsibility to analyze the price or cost the Commonwealth pays for its IT goods and services.
 - A fair and reasonable price is characterized by factoring industry and market pricing with the expected value and quality of products, solutions and/or services to be received. Fair and reasonable does not necessarily mean the lowest offer.
 - Fair and reasonable pricing is determined by conducting either a price analysis or cost analysis.

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9.0 Introduction

A fair and reasonable price can be reached by factoring industry and market pricing with the expected value and quality of the IT products, solutions and/or services to be received. Fair and reasonable does not necessarily mean the lowest price offer. All information technology (IT) procurement professionals have a fiduciary responsibility to analyze the price or cost the Commonwealth pays for its IT goods and services and to pay no more than a fair and reasonable price for such goods and services. These are things to keep in mind when analyzing the pricing of IT goods and services:

- Most commercial items are considered to be fairly priced. Buyers and suppliers have many product and supplier choices and there is a balance of market leverage. If there is adequate competition among suppliers, then buyers can generally rely on market-based prices as being fair and reasonable. However, if there is only one supplier, and many buyers, then the marketplace does not ensure that a price is fair and reasonable; it is simply the price the market will bear.

- Commonwealth procurement professionals are held to a higher standard than just accepting “what the market will bear.” They must determine and verify that the price they have agreed to pay is a fair and reasonable price. A price that has been established in a non-competitive commercial marketplace is not necessarily fair and reasonable. There is no harm in asking the supplier to provide evidence of prices charged to other similar customers purchasing like IT products and services.
- IT procurement professionals may be reluctant to challenge the advertised commercial price of an IT good or service. Do not make the mistake of considering commercial or advertised pricing non-negotiable. Securing an optimum pricing agreement may require challenging the market for the best terms. Commerciality can impact the original contract as well as modifications. If a modification is so significant as to alter the commerciality of an item, then cost or pricing data may be needed.
- Services (e.g., packaging, shipping, and availability) for commercial items may exceed the Commonwealth’s need. It may be possible to negotiate a price reduction by reducing or eliminating some of these services, thus reducing the supplier’s cost and the price charged to the Commonwealth, while still ensuring that the item meets the Commonwealth’s need.
- Alternatives may not have been sufficiently reviewed. Areas overlooked may include cost benefit analysis of lease versus buy or analysis of spare or replacement parts pricing.
- Catalog pricing may be restrictive based on the quantity being purchased or the Commonwealth’s requirements may exceed normal commercial demand. If so, the buyer should attempt to negotiate a lower price for quantities greater than listed in the catalog to maximize possible discounts or rework the requirements to reflect market available IT goods and services.

9.1 Fair and reasonable pricing

9.1.1 Fair pricing

Buyers and suppliers may have different perceptions on what price is fair. To be fair to the buyer, a price must be in line with the fair market value of the contract deliverable. To be fair to the supplier a price must be realistic in terms of the supplier's ability to satisfy the terms and conditions of the contract. In agreeing to a price that is too low a supplier may:

- cut corners on product quality
- deliver late
- default, forcing a time-consuming re-procurement
- refuse to deal with the Commonwealth in the future
- be forced out of business entirely

Below-cost prices are not necessarily unfair to the supplier. A supplier, in its business judgment may decide to submit a below-cost bid. Such a bid is not invalid. Whether the supplier can then perform the contract at the low price offered is a matter of responsibility which may pose a risk to the buyer. Be aware of suppliers who submit offers below anticipated costs and may expect to either increase the contract amount after award through change orders or to receive follow-on contracts at higher prices to recover losses incurred on the buy-in contract. In addition, the offered price may be unexpectedly low because the supplier has made gross mistakes in determining price.

9.1.2 Reasonable pricing

A reasonable price is a price that a prudent and competent buyer would be willing to pay given available data on market conditions. Economic forces such as supply, demand, general economic conditions and competition change constantly. Hence, a price that is reasonable today may not be reasonable tomorrow. Markets can be defined by considering

the number of buyers, the number of suppliers, product homogeneity, and ease of market entry and exit. Market conditions include:

- **Supply and demand.** The forces of supply and demand have a significant effect on the price of IT goods and services.
- **General economic conditions.** General economic conditions affect the prices of all goods and services, but the effect will not be the same for every product. Inflation and deflation affect the value of the dollar. Economic boom, recession and depression affect available production capacity.
- **Competition.** When competition does not exist, the forces of supply and demand may not work effectively. The buyer or supplier may have an advantage in the pricing decision process. Solicitation specifications that are not well defined or are too restrictive, proprietary or aimed at one solution could restrict price competition.

9.1.3 Determining a fair and reasonable price

Fair and reasonable pricing is determined by conducting either a price analysis or cost analysis.

9.2 Price or cost analysis requirement

The most basic reason for requiring that a price or cost analysis be performed is to ensure Commonwealth funds are expended in the most cost effective manner.

9.2.1 Price analysis

Price analysis is the process of deciding if the asking price for an IT product, solution or service is fair and reasonable, without examining the specific cost and profit calculations the supplier used in arriving at its price. It is basically a process of comparing the price with known indicators of reasonableness. When adequate price competition does not exist, some other form of analysis is required.

9.2.2 Methods of price analysis

The most common methods or criteria used to determine whether a price is fair and reasonable are:

- **Price competition.** When two or more acceptable offers are received and the lowest price is selected, the price of the lowest offeror can be assumed to be fair and reasonable. It is noted that generally where the difference in prices between the two offers ranges up to 15%, price competition is said to exist. A price which is very low must be checked to assure that the supplier understands what he is selling and has made no errors.
- **Catalog or established price list.** Where only one offer is received and the supplier has a published or established price list or catalog which sets forth the price of an IT good that is offered generally, this fact can be used to find the price fair and reasonable. The catalog should be current (within one year, usually). It is a good idea to obtain a name of another recent purchaser and confirm that this was the price paid. Often, discounts off of the price list are offered. If this is the case, it should be included in the written price analysis. The IT good to be purchased should generally be a commercially produced one sold to the general public in substantial quantities.
- **GSA contracts or pricing agreements.** The federal government often enters into contracts with various companies as to the prices of items which will be sold to the government. Typically these are the highest prices that a supplier can sell a single unit to a federal government agency, and they often include fees and rebates back to the federal General Services Administration (GSA). A fair and reasonable price is typically lower than GSA prices.

- **Price based on prior competition.** If only one supplier bids and the price of the item is relatively the same as the price of the item when it was purchased using an earlier competition, this may be acceptable. In such cases, the buyer must cite the price of the prior purchase and note if it was competitive or based on catalog price or other means. An increase in price, with no current catalog or competition, should be near the current rate of inflation.
- **Comparison to substantially similar item(s).** Often an item is very similar to a commercial one but has added features, which are required. If the supplier can validate the price of the base item, by a catalog, and then state the cost of the additional features, the buyer can determine the price is reasonable based on these two factors. The reasonableness of the extra cost can be checked from other purchases that had similar extras or be based on an evaluation of the extra cost by technical subject matter experts.
- **Sales of the same item to other purchasers.** If the supplier has no catalog but has sold the same item to others recently, the price can be determined to be fair and reasonable by verifying with those other purchasers what price they paid.
- **Market prices:** Where an item has an established market price, verification of an equal or lower price also establishes the price to be fair and reasonable.
- **Historical prices.** If the buyer has a history of the purchase of the item over several years, use of this information, taking into account inflation factors, can be used to determine a price fair and reasonable. Refer to Appendix A for more details on historical prices.
- **Independent estimate.** If an independent 3rd party estimate of the item has been prepared and other methods or information is available, a price can be compared to the estimate. If it compares favorably this can be the basis to find a price fair and reasonable.

9.2.3 Cost analysis

Cost analysis should be performed in situations where price analysis does not yield a fair and reasonable price. The goal of cost analysis is to determine whether the supplier's costs are in line with what reasonably economical and efficient performance should cost. Cost or pricing data provided by the supplier is the means for conducting cost analysis and provides factual information about the costs that the supplier says may be incurred in performing the contract. Cost analysis techniques are used to break down a supplier's cost or pricing data to verify and evaluate each component. Some of the cost elements examined for necessity and reasonableness are materials' costs, labor costs, equipment and overhead. These costs can be compared with actual costs previously incurred for similar work, the cost or pricing data received from other suppliers, and independent cost estimate breakdowns.

9.2.4 When to perform a cost analysis

Cost analysis is used whenever there is no price competition or when the price is set by law or regulation, a cost analysis is not required. A cost analysis is required when:

- Negotiating a contract with a sole source or on an emergency basis.
- If during a competitive sealed bidding solicitation, only one bid is received and it differs substantially from your agency's independent estimate of the contract price. If it is determined that the bid is unreasonable and a decision is made to not re-compete (e.g., market survey indicates that you would not get competition), then the agency may formally cancel the solicitation and negotiate a contract price with the single bidder. A cost breakdown of the single bid price must then be obtained, analyzed and a determination made about that price's reasonableness.
- Negotiating a contract price modification. If the modification changes the work authorized under the contract, and changes the price or total estimated cost either

upwards *or* downwards, the buyer should obtain a detailed breakdown of the supplier's proposed costs before negotiating the change in contract price.

- Insight into the supplier's fixed and variable cost structures would allow the buyer to negotiate volume discounts appropriate for the volume.
- Identification of the key drivers of the supplier's costs would allow the buyer an opportunity to impact or reduce one or more of these key cost elements in order to negotiate a lower price for the Commonwealth.
- Price analysis is inadequate to determine a fair and reasonable price.

9.3 Other price evaluation factors

There are other price-related factors that need to be considered when determining the price to be used in evaluating a supplier's proposal or bid. Some examples include:

- Multiple awards or the costs associated with awarding multiple contracts.
- Logistical support requirements including maintenance, warranty protection or repair, training, installation, technical manuals, spare parts and supplemental supplies. Request prices for all such services needed either on a per-service basis, package basis or some combination.
- Life cycle costing including expected life, salvage value, discounted total cost of ownership. Select life cycle costing for equipment with an expected life greater than one year if there are sufficient data, from market research.
- Economic price adjustments based on projected and historical data.
- Transportation and/or shipping costs.
- Packaging and marking costs.
- Lease versus purchase costs. Perform an analysis to determine which is of greater overall value based on ownership, support and maintenance and life-cycle needs.
- Options and/or multiyear costs. Sometimes alternate pricing is available if your agency is willing to contractually commit up front to an extended base term and/or minimal out-year support and maintenance terms; however, there are many project and/or budgetary considerations that must be taken into account with state agencies.
- Incremental pricing or quantity discounts.
- Energy conservation and efficiency criteria.
- Estimated quantities.

9.4 Evaluating warranty pricing to determine if price is fair and reasonable

Common warranties include general warranty, express warranty, implied warranty of merchantability, and implied warranty of specifications. Warranty pricing may be greater on warranties other than general or express, which are likely built into the IT product's or service's market price.

Term	Definition
General warranty	Is a promise or affirmation given by the supplier regarding the nature, usefulness, or condition of the supplies, solution or performance of services furnished under a contract.
Express warranty	Means the warranty terms as defined in the contract.
Implied warranty of merchantability	Means the implication by sale of the item is that it is reasonably fit for ordinary purposes for which the item is used. Items must be of at least average, fair, or medium-grade quality and must be comparable in quality to those that will pass without objection in the trade or market for items of the same description.
Implied warranty of specifications	Is interpreted as the supplier's specific warranty to the Commonwealth that its design specifications can be successfully used to perform a contract. When a supplier fails to perform because such

	<p>specifications are defective, it can assert a constructive change claim in order to obtain an equitable adjustment in the contract price. Essentially, by providing the supplier with specifications to be followed in carrying out the contract work, the Commonwealth warrants that if the supplier complies with those specifications, an adequate result will follow.</p>
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The principal purpose of warranties in a Commonwealth contract is to delineate the rights and obligations of the supplier to the Commonwealth for defective work or products and to foster quality performance. By agreeing to a warranty, suppliers accept the risk of deferred liability. That acceptance of risk has associated costs and a supplier's unwillingness to accept that risk may drop them from the competition. Other suppliers may increase their prices to compensate for the risk.

Before a warranty provision or requirement is included in a solicitation, the buyer should evaluate the benefits of the warranty against the effect on competition and price. The buyer should understand the relationship between warranty requirements, competition, the nature of the product, and trade practice. Warranty requirements that are unreasonable will reduce competition and increase price. Requirements that significantly exceed trade practice will also reduce competition and increase price. Agencies should identify and eliminate warranty requirements that will increase costs, unless to do so would incur further risk or liability on the IT project or the Commonwealth. In a warranty analysis, the following should be considered:

- For commercial items, use commercial or standard warranties rather than Commonwealth or agency-unique warranties.
- For non-commercial items, tailor warranty requirements to mirror existing market or trade practices.
- When a Commonwealth or agency-unique warranty is required, solicit the warranty as a separately priced line item, which the agency may or may not include in the final contract.
- If the agency is unsure about the benefits of an extended warranty, solicit offerors for the extended warranty as a separately priced option, especially for out-years.
- Take advantage of commercial warranties (including extended warranties, where appropriate and in the Commonwealth's best interest) offered by the supplier for the repair and replacement of commercial items.
- In solicitations for standard IT goods or services, require suppliers to offer the Commonwealth at least the same warranty terms, including offers of extended warranties, as those offered to the general public in customary commercial practice. For example, the supplier may provide warranty services to select high volume customers that are not offered to the general public. If the Commonwealth is not one of those select customers, do not expect to receive extra warranty services without having to pay extra for them.
- In some markets, customary commercial practices may exclude or limit the implied warranties contained in the Commonwealth's contract terms and conditions. In such cases, the Commonwealth must ensure that the express warranty provides for the repair or replacement of defective items discovered within a reasonable period of time after acceptance.
- Analyze the proposed warranty period as a price factor. In IT procurements, it is a buyer's best practice to insist that a warranty period begin after final acceptance of the product, service or solution rather than at time of delivery or installation and last for a longer negotiated period; however, a COTS software warranty may have a shorter warranty period (60, 90 days after installation.) Major technology solution contracts may

necessitate a year-long warranty period after final acceptance and affect pricing but be worth it.

- Study the supplier's proposed warranties as price factors to ensure Commonwealth stakeholders and users comply with any restrictions that would void the warranty and negotiate these to the reasonable price benefit of the Commonwealth.

9.5 Price reasonableness determination documentation requirements

A written price reasonableness determination is required to determine if offered prices are fair and reasonable when:

- Competition is restricted or lacking, i.e., sole source purchases, emergency procurements, single response purchases, contract changes and renewals,
- The prices offered do not appear on the face of the proposal or bid to be fair and reasonable,
- The decision is made to award to other than the lowest bidder or highest ranking offeror (appropriate award clause must have been included in the solicitation).

The written determination of fair and reasonable price requires that the price is acceptable to both the agency and the supplier considering all circumstances, which may include the degree of competition, market conditions, quality, location, inflation, value, technology and unique requirements of the procuring agency. The written determination may be based on price analysis (comparison with prices previously paid, prices charged for functionally similar items, prices paid by other consumers, prices set forth in a public price list or commercial catalog, or state estimates) or through the analysis of price-to-unit variations, value analysis (make-or-buy study), or cost analysis. The written analysis must be supported by factual evidence in sufficient detail to demonstrate why the proposed price is deemed to be fair and reasonable. If a determination is made that the prices offered are not fair and reasonable, a decision must be made whether to seek broader competition through a re-solicitation, to revise specifications and re-compete, or to negotiate a better price identified through the price analysis process. A combination of these methods may be necessary.

Appendix A Researching Historical Pricing Data

Research of historical market information can provide analysis of the acquisition situation for the product at some point(s) in the past. The following table presents research elements that should be considered when conducting historical pricing research and examining historical acquisition information.

Research element	You should be able to answer questions such as...
Trends in supply and demand	When did past acquisitions take place? Is there any indication of prevailing market conditions at that time?
Pattern of demand	What quantities were solicited for each acquisition? What quantities were acquired?
Trends in prices	What was the contract price? How did the unsuccessful offers compare with the successful offer?
Start-up costs and pricing strategy	Did the contract price include one-time engineering, tooling, or other start-up costs? Should future contracts include similar or related costs? Were necessary start-up costs paid for in a manner separate from the price for the item or service?
Sources of supplies or services	How many sources were solicited for the prior acquisition? What specific sources were solicited? How many sources offered bids or proposals? What specific sources offered bids or proposals?
Product characteristics	Are there any significant differences between the requirements documents for the prior contract and the current requirements?
Delivery/performance terms	What was the delivery or performance period in days, weeks, months, or years? In what month(s) were the supplies to be delivered, the service to be performed or the milestones/deliverables completed? Did the supplier meet the delivery or major deliverable or milestone targets? What was the FOB point? Were premium transportation costs or additional resources required for timely delivery or project completion?
Ownership costs	What costs of ownership were associated with the acquisition?
Acquisition Method	What acquisition method was employed for past acquisitions?
Contract terms and conditions	What were the general terms of past contracts? Are there any significant differences between terms of the last contract (e.g., packing requirements, type of contract, service/performance requirements) and those recommended for this acquisition?
Problems	What problems (if any) were encountered during contract performance?

Appendix B
Price Reasonableness Determination Form

This form is available on VITA SCM's website at the following URL:
https://www.vita.virginia.gov/media/vitavirginiagov/supply-chain/docs/Price_Reasonableness_Determination_Form.doc