Ch 1 - Conduct Market Research for Price Analysis

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1.0 Chapter Introduction

Presolicitation Market Research. In Government acquisition, market research requires collecting and analyzing information about capabilities within the market to satisfy Government needs. Market research policies and procedures should be designed to arrive at the most suitable approach to acquiring, distributing, and supporting supplies and services. The personnel involved must ensure that legitimate needs are identified and trade-offs evaluated to acquire items which meet those needs.

To get the supplies and services that will best meet the needs of the Government, the Government members of the Acquisition Team must understand the true needs of the Government and know what is available in the marketplace. Market research should be an on-going process for every member of the Acquisition Team, but there are three points where effective market research is particularly important:

- The purchase request should reflect the results of market research conducted by the requester. The requester should consider input from other Government members of the
Acquisition Team, especially from the user (if different than the requester) and Government technical personnel. Contracting personnel should support and encourage requester market research efforts whenever possible. For example, the catalogs and price lists available in the contracting office may be invaluable to the requester's market research effort. Contracting personnel should not take the responsibility for developing the requirements documents and should remind other members of the Team not to disclose source selection information outside channels authorized by the agency head (see FAR 3.104).

- Before soliciting offers for acquisitions with an estimated value in excess of the simplified acquisition threshold, you must conduct market research to assure that together the requirements documents and the contract business terms form the most suitable approach to acquiring, distributing, and supporting supplies and services. This research may be a one-time analysis or part of your on-going effort to know and understand the marketplace for the items that you routinely procure. As you perform your market research, you may question the requirements documents, but you must never change those documents without authorization from the requester.

- Before soliciting offers for acquisitions with an estimated value less than the simplified acquisition threshold, you should perform market research whenever adequate information is not available and the circumstances justify its cost.

**Information for Market Research.** When conducting market research, you should not request potential sources to submit more than the minimum information necessary. Most firms will gladly support Government market research as long as the result will benefit the firm. Most will provide complete information about how the products that they can provide will meet Government requirements. However, they are unlikely to provide information about problems with their products or about other products that could better meet the Government's needs at a lower total cost.

Generally, information on a particular product or industry is available from many sources other than potential offerors. These sources include:

- Knowledgeable individuals in Government and industry;
- The results of recent market research undertaken to meet similar or identical requirements;
• Government data bases that provide information relevant to agency acquisitions;
• Interactive, on-line communication among industry, acquisition personnel, and customers;
• Source lists of similar items obtained from other contracting activities or agencies, trade associations or other sources; or
• Catalogs and other generally available product literature published by manufacturers, distributors, and dealers or available on-line.

Market Research Results  Use the results of market research to:

• Determine if there are sources capable of satisfying the agency's requirements;
• Determine if commercial items or, to the extent commercial items are not available, nondevelopmental items are available that:
  o Meet the agency's requirements;
  o Could be modified to meet the agency's requirements;
  or
  o Could meet the agency's requirements if those requirements were modified to a reasonable extent.
• Determine the extent to which commercial items or nondevelopmental items could be incorporated at the component level;
• Determine the practices of firms engaged in producing, distributing, and supporting commercial items, such as terms for warranties, buyer financing, maintenance, and packaging and marking; and
• Ensure maximum practicable use of recovered materials and promote energy conservation and efficiency.

Market Research and Contract Pricing. FAR Part 10 requires that you use the results of market research in developing Government requirements and determining how you will satisfy those requirements. This research is required because the decisions made in the presolicitation phase of the acquisition process will be key factors in defining what the Government receives and the price that the Government will pay. For example, contracting decisions that:

• Increase contractor performance costs will normally increase contract price.
• Lower contractor performance costs will normally reduce contract price.
• Limit competition will normally increase contract price.
• Facilitate competition will normally reduce contract price.
• Increase contractor risk will normally increase contract price.
• Limit contractor risk will normally decrease contract price.

The better you understand the marketplace the better you will be able to make decisions that will enable you to meet the needs of the Government at a reasonable price.

This same understanding of the marketplace will enable you to develop a better estimate of a reasonable price for a contract that meets the needs of the Government. Your preliminary price estimate and the factors that affect contract price will be key inputs to the acquisition planning process. For example, the method of contracting and required contract terms and conditions both depend on your estimate of contract price. In addition, your preliminary estimate of contract price will become a key input to your final determination of contract price reasonableness.

1.1 Reviewing The Purchase Request And Related Market Research

When determining how much reliance you can place on the Independent Government Estimate in making contracting decisions, you must evaluate the depth and quality of the analysis involved in developing the estimate. As a minimum, you should consider the following five areas:

• 1.1.1 - How Was The Estimate Made?
• 1.1.2 - What Assumptions Were Made?
• 1.1.3 - What Information And Tools Were Used?
• 1.1.4 - Where Was The Information Obtained?
• 1.1.5 - How Did Previous Estimates Compare With Prices Paid?

Purchase Request. The purchase request is the document that formally transmits the requirement to the contracting office. It is the purchase request that typically first combines the Government requirements document with the Independent Government Estimate of contract price. Normally, the purchase request will also include an assurance that funds are available or will be available to fund the acquisition of the required supplies or services.
Independent Government Estimate (FAR 15.404-1(b)(2)(v)). As the name implies, the Independent Government Estimate must be developed independently by the Government. Independent development is vital because this estimate normally provides your first indication of a reasonable contract price and it is also one of the bases that you should consider in contract price analysis. The estimate development process may be automated or manual, but the best estimates reflect the requester's market research.

Reviewing Requester Market Research. FAR Part 10 requires market research before developing new requirements documents for an acquisition. Logically, this responsibility falls on the requester. The quality of the requester's Independent Government Estimate usually depends on the quality of the requester's market research. Because of the importance of the Independent Government Estimate to your selection of appropriate acquisition techniques and eventually your decision on price reasonableness, you should review the estimates carefully, before initiating further procurement action.

1.1.1 How Was The Estimate Made?

Estimate Preparation. To judge the reliability of a Government estimate, you must know how the estimate was made. Purchase requests may be prepared by an automated system or manually by the requester or an estimating specialist.

- Automated Purchase Request Estimates
  - Estimates for purchase requests prepared by an automated system are developed following an algorithm that has been programmed into the system. The most common algorithm is to set the unit price estimate equal to the last unit price paid.
  - Estimates prepared by automated systems rarely take changes in the market situation into account. Even such basic factors as changes in price related to changes in quantity are not considered. For example, assume that the requirement is for 5,000 generators. If the last acquisition was for a single generator, the estimated unit price for each of the 5,000 generators would be the same as the price for a single generator.
  - When you make acquisitions based on automated purchase requests, you must learn what market factors (if any)
are considered in preparing the request. Factors not considered in estimate development should be special areas of emphasis in your market research. Once you understand the algorithm for developing the automated estimate, you should remain alert to possible changes in that algorithm.

- Manual Purchase Request Estimates
  - Estimates for manual purchase requests are typically prepared by the individual preparing the purchase request. Different organizations, and different individuals within the same organization, may have different methods of developing the Government estimate.
  - Estimates should reflect any market changes identified during market research. Unfortunately, many do not. Instead manual estimates, like automated estimates, are often based on the last unit price paid with no consideration of changes in the market situation.
  - You must determine how each individual estimate was developed so that the other questions concerning reliability can be examined. This also provides a general insight into the amount of time devoted by the requester to market research.

1.1.2 What Assumptions Were Made?

Every estimate involves assumptions. Knowing and understanding those assumptions can give you an insight into the estimator's understanding of reliable estimate development.

Analysis of Assumptions In many cases, user/technical/program personnel are not familiar with relevant cost factors and market forces that affect contract pricing. As a result, assumptions and estimates may not be accurate.

If the rationale used to develop the estimate is not clear or does not seem reasonable, ask questions! **IN PRICING, THERE ARE NO DUMB QUESTIONS!** If you do not know, ask! By asking questions about the Independent Government Estimate and accompanying documentation, you can identify assumptions that are not consistent with market realities and work with the requester to improve the estimate before the contracting process begins.
Estimate Example 1: The requester used the last price paid for an item to estimate the price for the same item 10 years later.

- **Assumptions** The requester has assumed that the last price paid was reasonable, and that the market situation has not changed in 10 years.
- **Analysis** Over a few days or weeks, it may be reasonable to assume that the price has not changed if quantity, delivery, and other factors have not changed. But in this case the last purchase was made 10 years ago? Normally, it is not reasonable to assume that the price has not changed in 10 years. Once you identify the assumptions used in estimate development, you can evaluate them and adjust for any that do not appear consistent with market realities.

Estimate Example 2: The requester estimated the price of 100 warehouse trucks with 3 cubic foot capacity based on the price paid for 2 cubic foot units acquired during the last month.

- **Assumptions**. The requester has assumed that the recent price was reasonable, and that the unit price is not affected by changes in unit capacity.
- **Analysis**. The assumption that unit price will not be affected by the unit's capacity may or may not be reasonable. However, the great difference in capacity should lead you to subject this assumption to closer scrutiny during your market research.

1.1.3 What Information And Analysis Were Used?

It is important to determine what the requester knows about the item or service being requested and what type of analysis was used in estimate development.

*Market Research Information.* The **most successful estimators** know their item. Before they make an estimate, they collect information on the product and the market for that product. Their market research may be a one-time effort or part of an on-going process that is an integral part of their normal job.

The **most reliable estimates** are prepared by estimators who have performed detailed market research and can answer "yes" to the following questions that apply to a particular purchase request:
Did the estimator perform a detailed analysis of the Government requirements documents?

Is the estimator familiar with the market for the item, including:
   - Last price paid?
   - General market price changes?
   - Current commercial market price?
   - Quantity price breaks?
   - Possible substitutes?

*Estimating Analysis.* Market information alone is usually not enough. The estimator must be able to *apply* appropriate analysis to estimate development. Reasoned analysis provides a much more supportable estimate than one that is simply based on estimator judgment and experience. The strongest estimates are usually the result of a reasoned analysis supported by the use of appropriate quantitative techniques.

*Reasoned Analysis.* A reasoned analysis is an analysis that sets forth the known information and clearly explains how it was used in estimate development. This analysis may or may not be supported by the use of quantitative techniques.

*Quantitative Techniques.* When appropriate, adjustments should be made using accepted quantitative techniques. For example, index numbers can be used to quantify price changes and adjust historical pricing data.

*Estimate Support Comparison.* Estimates supported by words such as "professional judgment," but no factual data, are typically of little value. Estimates based on good information and the application of appropriate quantitative techniques or reasoned analysis will generally be more accurate and easier to support throughout the acquisition process. For example, in an analysis of changes in technology, which of the following techniques would be more useful in price estimation?

*Professional Judgment.* "Based on my 20 years of experience as a Project Engineer and my knowledge of the product, I estimate the price of this unit at $585,000."

*Reasoned Analysis.* "We are requesting new high sensitivity replacement units. A year ago, a product could not be produced with this level of sensitivity to high frequency sound. Today, units with similar sensitivity improvements are available at a 30 percent higher price than the less sensitive units they replaced. Therefore the estimated price for this unit, $585,000,"
is 30 percent higher than the $450,000 price last paid for the less sensitive unit that it will replace."

1.1.4 Where Was The Information Obtained?

The breadth and depth of the requester's market information will have a substantial impact on the quality of the estimate. Learn what you can about the sources of information used by the requester in estimate development, because some sources of information are better than others. Knowing the sources of information will make it easier for you to evaluate the reliability of the estimate.

Estimate Information Sources. Many estimators rely exclusively on historical prices as their base for estimate development. Historical prices are an excellent source of information on the price at some point in the past but market conditions and Government requirements change over time. Past prices for a similar item may have been based on detailed Government specifications while the current requirement is based on products commonly traded in the commercial market place. In that situation, historical prices may not provide a viable price estimate.

Encourage requesters to provide source data with their estimates. Information, such as a vendor catalog or portion thereof, will provide an excellent starting point for your market research.

Product Analysis. If the requirement is unique and there is no price history available, the estimator must develop a price estimate by some other form of analysis. One option is for the requester to develop an estimate based on an evaluation of the material and labor required to produce the product. When such estimates are required, the more current the data used to develop the cost estimate, the more reliance you can place on the estimate.

Misleading Information. Many data sources, such as stock lists, can present information that is difficult to use in price estimating. The price information is usually not current and there is typically little information about its source. Prices may be historical prices from an unknown point in the past or even averages of historical prices. It is typically difficult or impossible to adjust these prices for changes in the market.
situation. As a result, you must be particularly careful when using such data as a base for estimated development.

Emphasize Estimator Independence. While use of vendor catalogs and other methods of market research should be encouraged, estimators MUST BE DISCOURAGED FROM CONTACTING VENDORS FOR SPECIFIC QUOTATIONS. This is particularly true in sole source situations, where the Independent Government Estimate may be a primary basis for determining price reasonableness. If both the estimate and the proposal come from the offeror, there is no independent measure of price reasonableness.

1.1.5 How Did Previous Estimates Compare With Prices Paid?

An examination of the Independent Government Estimate should include an examination of the estimator's track record. Just as past vendor performance is an indicator of future contract performance, the quality of past estimator performance is an indicator of the quality of the current estimate.

Comparison with Prices Paid. In evaluating estimates, ask: "Have the estimator's past estimates been close to contract prices determined fair and reasonable through analysis using other price analysis techniques?"

If the answer is yes, greater reliance can be placed on current estimates developed using similar techniques.

If the answer is no, less reliance should be placed on these estimates.

1.2 - Considering Contract Pricing In Your Market Research

The Independent Government Estimate is only one preliminary estimate of contract price. As a minimum, your research, should consider the following data sources:

- 1.2.1 - Historical Pricing Data For Market Research
- 1.2.2 - Published Data For Market Research
- 1.2.3 - Market Research Data From Buyers And Other Experts
- 1.2.4 - Market Research Data From Prospective Offerors
- 1.2.5 - Market Research Data From Other Sources
**Factors to Consider in Researching the Market.** Each time you conduct market research the process will be different because of differences in Government requirements, market conditions, and other factors. The following table identifies research factors and outlines the type of questions that you should be able to answer when you complete your market research. Not all of the questions identified in the table will be valid for every acquisition. For some acquisitions, you will have many specialized questions that are not covered in the following table. However, the research factors identified and the related questions provide a good framework for your market research.

### Pricing Factors to Consider in Market Research

<table>
<thead>
<tr>
<th>Research Factor</th>
<th>You Should Be Able to Answer Questions Such As...</th>
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<tbody>
<tr>
<td>Pricing History</td>
<td>• What information is available concerning past prices paid for the product and changes in the product or market since then?</td>
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<td></td>
<td>• Have there been historic differences between prices paid by the Government vis-à-vis other buyers? Why?</td>
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<tr>
<td>Current Competitive Conditions</td>
<td>• How many sellers are in the market?</td>
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<tr>
<td>Current Overall Level of Demand</td>
<td>• How many buyers?</td>
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<td>• What is the relationship of the quantity we intend to buy vis-à-vis the quantities that others buy?</td>
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<td>• Will our volume justify a lower than market price due to the seller's increased economies of scale?</td>
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<td>• Will our volume be so large as to drive the sellers to or beyond full capacity, resulting in unanticipated inflation?</td>
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<td>Trends in Supply and Demand</td>
<td>• Will demand be higher or lower at the time of award than now?</td>
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<td>• Will supply capacity keep pace with demand?</td>
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<tr>
<td>Pattern of Demand</td>
<td>• Is there a cyclical pattern to supply and demand?</td>
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<td>• Would awarding six months from now result in lower prices than an</td>
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</table>
immediate award?
- Or would it be better to stock up now at today's prices?

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<tr>
<th>Other Market Forces Expected to Affect Contract Price</th>
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<tr>
<td>What forces might lead us to expect lower prices in the future?</td>
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<th>Pricing Strategies</th>
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<tr>
<td>What are the pricing strategies of firms in the market?</td>
</tr>
<tr>
<td>What are the implications for expected prices?</td>
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</table>

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<thead>
<tr>
<th>Sources of Supplies or Services</th>
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<tbody>
<tr>
<td>Which firms in the market are the most likely to submit offers to a Government solicitation?</td>
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<tr>
<td>Which are the least likely and why?</td>
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<tr>
<th>Product Characteristics</th>
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<tbody>
<tr>
<td>What features distinguish one product from another?</td>
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<tr>
<td>Which commercial products match most closely with the Government requirements document (as it currently reads in the purchase request).</td>
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<tr>
<td>What is the apparent tradeoff between features and price?</td>
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<tr>
<th>Delivery/Performance Terms</th>
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<td>What are the current distribution channels?</td>
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<td>What are current transportation costs (if available and applicable)?</td>
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<td>What are the commercial lead-times?</td>
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<tr>
<th>Ownership Costs</th>
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<tbody>
<tr>
<td>What are the commercial warranty terms and conditions (if any)?</td>
</tr>
<tr>
<td>What are the historical repair costs for each product?</td>
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<tr>
<td>What are the historical maintenance costs for each product?</td>
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<table>
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<tr>
<th>Contract Terms</th>
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<tbody>
<tr>
<td>What terms and conditions are used in</td>
</tr>
</tbody>
</table>
and Conditions

- What terms and conditions have been used in other Government acquisitions?
- What type of contract is generally used in commercial transactions?
- Government acquisitions?

Problems

- What has been the historical default rate by firms performing similar contracts?
- What performance problems have typically been encountered?
- Have similar acquisitions been characterized by claims or cost overruns?

1.2.1 Historical Pricing Data For Market Research

Prior to contracting, FAR 7.103(l) requires the contracting officer to review:

- The acquisition history of the supplies and services; and
- A description of the supplies, including, when necessary for adequate description, a picture, drawing, diagram, or other graphic representation.

One of the reasons for this requirement is to ensure that prior prices are considered in estimating the proper price of the current acquisition. However, you must also remember that information from Government historical price data bases provides a picture of what happened in the past. You must integrate this information with information from other market research to enhance the accuracy of your price estimate.

Sources of Acquisition Histories. Acquisition histories can be found in many sources. Typically, the best sources are contract files, computerized acquisition data files, and manual item records.

Contract Files. Usually, the best source of information on past pricing decisions is the original file of the contract action.
Detailed information, and the rationale used to determine price reasonableness should be available in the file.

**Computerized Acquisition Data Files.** Computers provide immediate access to the data considered most important to purchase decision making. While computer data files may not be as complete as purchase files, they do provide key data in a form that can be used by the buyer in a timely fashion.

**Manual Item Records.** Manual item records typically provide data similar to that contained in computerized acquisition data files.

**Researching Historical Acquisition Pricing Information.** Historical prices are an excellent source of market information. Research of historical market information can tell you a lot about the acquisition situation for the product at some point or points in the past. For that information to be useful, you must be able to determine what the market situation was in the past and how it has changed since then. The following table presents research elements that you should consider in your examination of historical acquisition information and questions that you should consider in your research.

<table>
<thead>
<tr>
<th>Historical Acquisition Data for Pricing</th>
<th>Research Element</th>
<th>You Should Be Able to Answer Questions Such As...</th>
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</thead>
<tbody>
<tr>
<td><strong>Trends in Supply and Demand</strong></td>
<td></td>
<td>• When did past acquisitions take place?</td>
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<td></td>
<td>• Is there any indication of prevailing market conditions at that time?</td>
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<tr>
<td><strong>Pattern of Demand</strong></td>
<td></td>
<td>• What quantities were solicited for each acquisition?</td>
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<tr>
<td></td>
<td></td>
<td>• What quantities were acquired?</td>
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<tr>
<td><strong>Trends in Prices</strong></td>
<td></td>
<td>• What was the contract price?</td>
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<tr>
<td></td>
<td></td>
<td>• How did the unsuccessful offers compare with the successful offer?</td>
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<tr>
<td><strong>Start-up Costs and Pricing Strategy</strong></td>
<td></td>
<td>• Did the contract price include one-time engineering, tooling, or other start-up costs?</td>
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<td>• Should future contracts include similar or related costs?</td>
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<td></td>
<td></td>
<td>• Were necessary start-up costs paid for in a manner separate from the price</td>
</tr>
</tbody>
</table>
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 Government 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 or the service to be performed?
• Did the vendor meet the delivery targets?
• What was the FOB point?
• Was premium transportation required for timely delivery?

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, and the like) and those recommended for this acquisition?

Problems
• What problems (if any) were encountered during contract performance?
1.2.2 Published Data For Market Research

This subsection presents examples of several types of published information that you can use in developing your preliminary estimates of contract price.

- 1.2.2.1 - Manufacturer And Dealer Catalogs
- 1.2.2.2 - Product Brochures And Promotional Material
- 1.2.2.3 - Trade Journals
- 1.2.2.4 - Government Or Independent Testing
- 1.2.2.5 - Source Identification Publications
- 1.2.2.6 - Federal Supply Schedules (FSS)
- 1.2.2.7 - Government Economic Data
- 1.2.2.8 - Non-Government Economic Data

Typical Data Available by Source. The table below summarizes the sources of pricing related data and typical data available for each source.
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<tr>
<td>Catalogs</td>
<td>Yes</td>
<td>Often</td>
<td>Yes</td>
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<td>Yes</td>
<td>Yes</td>
<td>Rarely</td>
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<td>Product Brochures</td>
<td>Yes</td>
<td>Often</td>
<td>Often</td>
<td>Often</td>
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<td>Rarely</td>
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<td>Trade Journals</td>
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<td>Often</td>
<td>Rarely</td>
<td>Rarely</td>
<td>Rarely</td>
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<td>Advertisement</td>
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<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Govt or Independent Testing</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Qualified Products</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Lists</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Underwriters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>Often</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Often</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>--------------------------</td>
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</tr>
<tr>
<td><strong>Federal Supply Schedules</strong></td>
<td>Yes</td>
<td>Often</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Often</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Govt Economic Data</strong></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Non-Govt. Economic Data</strong></td>
<td>No</td>
<td>No</td>
<td>Some Do</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>
1.2.2.1 Manufacturer And Dealer Catalogs

Catalogs are familiar sources of data that can be found in both department stores and mail order houses. The manufacturer and dealer catalogs used in Government purchasing resemble these catalogs in the type of information they provide. Typical data you can find in manufacturer and dealer catalogs include:

- Product descriptions
- Pictures
- Prices and quantity discounts
- Minimum order requirements
- Delivery data
- Points of contact for quotes and orders

1.2.2.2 Product Brochures And Promotional Material

Brochures and promotional material provide much greater detail about specific products than would normally be included in a catalog with several thousand other products. While details on pricing and delivery are often included, this information may be excluded in order to provide greater latitude in negotiating the terms of sale.

The following are typical data you can find in product brochures and promotional material:

- Detailed specifications
- Pictures
- Available service guarantees and products
- Points of contact for quotes and orders
- Pricing information
- Delivery data

1.2.2.3 Trade Journals

Trade journals provide a variety of information from different sources, including advertisements, product evaluations, and independent articles.

Trade Journal Data Sources.
Advertisements typically consist of product descriptions, often with pictures and comparisons with competitor's products. Sources to consult for additional information may also be identified.

Product evaluations provide independent information to members of the trade who may be considering the purchase of that product or a similar one. Evaluations usually deal with technical capabilities, but often include information on source locations, pricing, and warranties.

Articles about the trade may indirectly provide an independent analysis of product capabilities. Successes or failures in using particular products or services serve as evaluations of their quality.

The table below gives an overview of typical data you can find in trade Journals.

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Typical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertisements for Products Used in the Trade</td>
<td>• General product descriptions</td>
</tr>
<tr>
<td></td>
<td>• Pictures</td>
</tr>
<tr>
<td></td>
<td>• Comparisons with competitive products</td>
</tr>
<tr>
<td></td>
<td>• List prices</td>
</tr>
<tr>
<td>Independent Product Evaluations</td>
<td>• Strengths and weaknesses of products</td>
</tr>
<tr>
<td></td>
<td>• Warranty or guarantee provisions</td>
</tr>
<tr>
<td></td>
<td>• Comparisons with competitive products</td>
</tr>
<tr>
<td></td>
<td>• Pricing information</td>
</tr>
<tr>
<td>Articles</td>
<td>• Application of existing products to problem solving</td>
</tr>
<tr>
<td></td>
<td>• Strengths and weaknesses of products in problem solving</td>
</tr>
</tbody>
</table>

1.2.2.4 - Government Or Independent Testing

Product testing by Government or independent laboratories can provide essential product data. The data can be used to determine if a product meets minimum requirements and to identify and compare similar products.
Qualified Products Lists (FAR 9.201 and 9.202(c)). The results of Government testing often means inclusion on a Qualified Products List (QPL). A QPL is a list of products which have been examined, tested, and have satisfied all applicable Government product qualification requirements. When a QPL applies to a particular product, all potential offerors must either be on the list or demonstrate to the satisfaction of the contracting officer that their product meets or can meet QPL standards before the date set for contract award. You can also use QPLs to identify potential sources for similar products.

Underwriters Laboratory. The best known independent testing laboratory is Underwriters Laboratory (UL). Testing and approval by UL is essential for a wide variety of electrical products.

The table below gives an overview of typical data you can obtain from product standards and testing laboratories.

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Typical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualified Products Lists</td>
<td>Results of product tests to Government requirements</td>
</tr>
<tr>
<td>Underwriters Laboratory (UL)</td>
<td>Results of tests of electrical products to UL commercial standards</td>
</tr>
</tbody>
</table>

1.2.2.5 Source Identification Publications

There are thousands of publications designed to assist you in locating possible sources of product information. The most widely accepted of these are the Yellow Page and the Thomas Register of American Manufacturers.

1.3 - Using Market Research To Estimate Probable Price

This section covers the following topics:

- **1.3.1 Evaluating Your Market Research**
- **1.3.2 Developing Your Price Estimate**

Use Market Research to Estimate Probable Price. As you perform your market research, document the sources of information that you considered and what you found. Consider how you can increase competition that includes firms that commonly sell the same or
similar items in the commercial market. At the same time, consider how current requirements, particularly Government-unique requirements will affect competition and contract price. Generally, both tasks will focus on the same requirements, because requirements that unnecessarily limit competition will also unnecessarily increase contract price.

1.3.1 Evaluating Your Market Research

Questions to Consider in Evaluating Your Research. The better your research, the more reliance you should be able to place on the price estimate that you develop from that research. The list below contains questions that you can use to evaluate the quality of your market research. Note that there may be some acquisitions where a particular question does not apply. For example, the first question deals with the use of historical price. If the Government has never acquired the product or a similar product, this question would not apply in your evaluation of estimate quality.

Factors to Consider in Developing an Estimated Price

In preparing your price estimate, have you considered:

- Historical prices paid for the product and changes in the product or market since then?
- The current level of competition between prospective offerors and how it will affect contract price?
- How increasing or decreasing the quantity being acquired would likely affect contract price?
- How changing the timing of the acquisition would likely affect contract price because of projected trends in supply or demand?
- How changing the timing of the acquisition would likely affect contract price because of projected cyclical changes in supply or demand?
- How other forces are expected to affect prices in the near future?
- How the pricing strategies of prospective offerors will affect contract price?
- Which firms in the market are expected to respond to the solicitation and how their prices compare with the firms that are not expected to respond?
- Whether the requirements document will unnecessarily increase prices proposed by offerors?
• Whether delivery/performance requirements will unnecessarily increase prices proposed by offerors?
• Whether different products from different vendors will have different costs of ownership?
• Whether contract terms and conditions will unnecessarily increase prices proposed by offerors?
• Ways to improve the risk related to problems associated with performance of similar contracts?

Evaluating Your Research. If you can answer "Yes" to all the questions in the list above, you have done an excellent job of market research for estimate development. When you must answer "No," your research is incomplete. For smaller dollar acquisitions, an incomplete evaluation may be acceptable as long at the evaluation covers the factors that you feel are most likely to affect contract price. However, as the estimated price increases, the need for in-depth research also increases.

1.3.2 Developing Your Price Estimate

Different Data, Different Estimates. As you perform your market research, you will likely find different data that could lead you to different preliminary estimates of contract price. Using the price that you paid for the item 11 months ago, your estimate might be $19,700. If you use the last price paid for the item plus 4 percent inflation your estimate might be $20,488. The catalog price for a similar item from a commercial vendor might be $19,750. The catalog price for a comparable item from a second vendor might be $19,900.

Consider Various Estimates. Which estimate is correct? There is no one answer. They all appear to be valid estimates based on the information used to develop them. This demonstrates a common situation -- there is no single estimate that you can say is right to the exclusion of all other estimates. In fact, they define a range of reasonable prices from $19,700 to $20,488.

You could document the various estimates in a paragraph or in a table similar to the following:

<table>
<thead>
<tr>
<th>Preliminary Estimate of Contract Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price Estimate</td>
</tr>
<tr>
<td>$19,700</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Estimating Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate based on the price determined fair and reasonable 11 months ago under contract XX-9X-XXXX.</td>
</tr>
</tbody>
</table>
$20,488  Estimate based on the price determined fair and reasonable 11 months ago under contract XX-9X-XXXX plus 4 percent inflation estimated using the Producers Price Index for similar items.

$19,750  Estimate based on current FloMo Systems catalog price for the quantity required.

$19,900  Estimate based on current Acme Products catalog price for the quantity required.

**Point Estimate.** Given this same information, different estimators could have different opinions as to which of these estimates you should use as your preliminary price estimate. That is one reason why it is so important to present the range of possible estimates and the rationale for each. However, in this case an estimate of $19,750 appears most reasonable because it is based on a current catalog price. Remember, the lower $19,700 estimate is 11 months old.

**Contract Type and Risk.** Estimators must consider the impact of contract type and resulting performance risk to contractors when estimating future costs and price, whether estimates are based on historical or market data or whether estimates are based on the judgment of qualified estimators. For example, sound estimating practices would include probable impacts of performance risk in estimates prepared under a fixed price contract. Performance risk at the pre-proposal and proposal preparation stage of the acquisition cycle is analogous to estimating uncertainty. In this context, risk associated with future performance must be evaluated by estimators in terms of the potential for variability of performance under a resulting fixed price contract arrangement and include, as appropriate, estimated costs associated with mitigating risk and the impact of the probable occurrence of risk. Prudent estimators will perform a risk assessment in conjunction with development of estimates to evaluate those presently known and existing conditions and their foreseeable effects on future performance such that, and within reasonable limits of estimating accuracy, estimates of future costs reflect the best estimate of performance cost and resulting price to the government. (FAR 16.103(a), FAR 31.205-7)