Price Analysis for Government Contracting

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Contract Pricing  
FAR Part 15.402

Contracting officers shall -

(a) Purchase supplies and services from responsible sources at fair and reasonable prices. In establishing the reasonableness of the offered prices, the contracting officer -

1) Shall obtain certified cost or pricing data when required by 15.403-4, along with data other than certified cost or pricing data as necessary to establish a fair and reasonable price; or When certified cost or pricing data are not required by 15.403-4, shall obtain data other than certified cost or pricing data as necessary to establish a fair and reasonable price, generally using the following order of preference in determining the type of data required:

i. No additional data from the offeror, if the price is based on adequate price competition, except as provided by 15.403-3(b).

ii. Data other than certified cost or pricing data...
# Price Analysis vs. Cost Analysis

**FAR 15.404 Definitions & Applicability**

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<tr>
<th>Type of Analysis</th>
<th>Definition</th>
<th>Applicability</th>
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<td><strong>Price Analysis</strong></td>
<td>Price analysis is the process of examining and evaluating a proposed price without evaluating its separate cost elements and proposed profit. FAR 15.404-1(b)</td>
<td>Price analysis shall be used when certified cost or pricing data are not required...Price analysis should be used to verify that the overall price offered is fair and reasonable. FAR 15.404-1(a)(2)&amp;(3)</td>
</tr>
<tr>
<td><strong>Cost Analysis</strong></td>
<td>Cost analysis is the review and evaluation of the separate cost elements and profit in an offeror’s proposal...and the application of judgment to determine how well the proposed costs represent what the cost of the contract should be, assuming reasonable economy and efficiency. FAR 15.404-1(c)(1)</td>
<td>Cost analysis shall be used to evaluate the reasonableness of individual cost elements when certified cost or pricing data are required. FAR 15.404-1(a)(3)</td>
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</tbody>
</table>
Price Reasonableness

Required but not defined within FAR Part 2

The price that a prudent person would pay for a product or service under current market conditions with buyers and suppliers free to bargain.
Price Analysis ≠ Price Justification

Price justification starts with the proposed price and “engineers” supporting evidence to show the price is fair and reasonable. This rarely leads to challenged proposal prices.

Price analysis is a process to develop a recommended position on price of a item or service utilizing factors independent of the proposed price itself - Developing a “Should-Cost.”
Price Analysis - When is it Required?

Required for all procurements and contract types, including:

- Government Contracts
- Commercial Contracts
- International Contracts
- Firm Fixed Price (FFP)
- Labor Hour (LH)
- Time & Material (T&M)
- Cost Reimbursable (CPFF, CPIF, CPAF, etc.)

Required for all dollar values:

- < $10,000 (Current Micro Purchase Threshold): FAR 13.203 Procedures Apply
- > $10,000: Informal price analysis
- ≥ $250,000: Formal written price analysis required
- ≥ $2,000,000 (Current TINA Threshold): Cost analysis may be required
Policy & Regulation

FAR 12 - Acquisition of Commercial Items
• 12.209 - Determination of Price Reasonableness

FAR 13 - Simplified Acquisition Procedures
• 13.106-3 Award and Documentation Procedures
• 13.203 - Purchase Guidelines at or Below the Micro-Purchase Threshold

FAR 14 - Sealed Bidding
• 14.408-2 - Responsible Bidder - Reasonableness of Price

FAR 15 - Contracting by Negotiation
• 15.402 - Pricing Policy
Price Reasonableness vs. Realism

• Price realism analysis is an evaluation conducted in order to determine a vendor/bidder’s understanding of the contract requirements to lead to an assessment of risk inherent in the proposal.

• Price realism analysis can supplement price reasonableness, as it may involve utilizing price analysis techniques to reach a conclusion.
Quiz

• True or False: The FAR requires Price Justification to establish fair & reasonable prices.

• True or False: Establishing price reasonableness never applies to purchases at or below the micro-purchase threshold.

• Price Reasonableness is discussed in which FAR sections:
  A. FAR 12
  B. FAR 13
  C. FAR 14
  D. FAR 15
  E. All of the Above
Cost + Profit = Price

Cost Analysis

Yes

Certified Cost or Pricing Data Required?

No

Price Analysis
Two Basic Questions

1) What is “certified cost or pricing data”?

2) When is it required?
Truthful Cost or Pricing Data (fka TINA)

PL 87-653, enacted in 1962 due to Congressional concerns over lack of government visibility into contractor’s estimated costs:

- Requires (1) submission of “cost or pricing data” by contractors in support of certain bids, and (2) certification by contractors that the “cost or pricing data” is **current**, **accurate**, and **complete** as of the **date of price agreement**

- Allows unilateral price adjustment for contractor’s failure to comply with requirements
Certified cost or pricing data means “cost or pricing data” that were required to be submitted in accordance with FAR 15.403-4 and 15.403-5 and have been certified, or is required to be certified, in accordance with 15.406-2. This certification states that, to the best of the person’s knowledge and belief, the cost or pricing data are accurate, complete, and current as of a date certain before contract award. Cost or pricing data are required to be certified in certain procurements (10 U.S.C. 2306a and 41 U.S.C. 254b).
Certified Cost or Pricing Data

FAR Definition - FAR 2.101

• All facts that, as of the date of price agreement...prudent buyers and sellers would reasonably expect to affect price negotiations significantly...

• Are factual, not judgmental; and are verifiable...

• Do not indicate the accuracy of the prospective contractor’s judgment about estimated future costs or projections, but they do include the data forming the basis for that judgment...

• Are more than historical accounting data; they are all the facts that can be reasonably expected to contribute to the soundness of estimates of future costs and to the validity of determinations of costs already incurred...

(Continued)
Certified Cost or Pricing Data

*FAR Definition - FAR 2.101*

Also includes, but is not limited to such factors as:

- Vendor quotations
- Nonrecurring costs
- Information on changes in production methods or purchasing volume
- Data supporting projections of business prospects and related operations costs
- Unit cost trends
- Make buy decisions
- Estimated resources to attain business goals
- Information on management decisions that could have a significant bearing on costs
Exemptions From Certified Cost or Pricing Data Requirements

*FAR Part 15.403-1*

- Adequate price competition (“APC”)
- Commercial items (“CI”)
- Prices set by law or regulation
- Waiver by Head of Contracting Activity (HCA)
- Modifications to commercial item contracts or subcontracts
Certified Cost or Pricing Data Requirements

\textit{FAR Part 15.403}

Unless below statutory \textit{threshold}\(^1\) or otherwise exempt, certified cost or pricing data is required for:

1) Award of any negotiated contract (except for undefinitized actions such as letter contracts)
   - A contract awarded using other than sealed bidding procedures is a negotiated contract

2) Award of a subcontract at any tier, if the contractor and each higher-tier subcontractor were required to submit certified cost or pricing data

3) Modification of any sealed bid or negotiated contract (whether or not certified cost or pricing data were initially required) or any subcontract in 2) above
   - Price adjustments must consider both increases and decreases
   - Includes negotiated final pricing actions (terminations, final price agreements on incentive and redeterminable contracts)

\(^1\)Current threshold for obtaining certified cost or pricing data is \$2M (effective 7/1/18)
Cost + Profit = Price

Cost Analysis

Yes

Certified Cost or Pricing Data Required?

Price Analysis

No

✓ <Threshold
✓ APC
✓ CI
Price Analysis Techniques
Price Analysis Techniques

FAR 15.404-1(b)

1. Comparison of proposed prices received in response to the solicitation*
2. Comparison of previously proposed prices and previous Government and commercial contract prices with current proposed prices*
3. Use of parametric estimating techniques
4. Comparison with competitive published price lists
5. Comparison with independent cost estimates
6. Comparison of proposed prices with prices obtained through market research for the same or similar items
7. Evaluation of data other than certified cost or pricing data provided by the offeror

* Preferred price analysis techniques
Price Analysis Techniques

Comparison of Proposed Prices Received

Generally considered one of the best bases for price analysis, because all offers were submitted to meet the same requirement during the same time period. FAR 15.404-1(b)(2)
Price Analysis Techniques

Comparison of Proposed Prices Received

Any proposed price used as a basis for price analysis must meet the following general requirements:

• The price must be from a responsible firm.

• The price must be submitted by a firm competing independently for contract award.

• The price must be part of an offer that meets Buyer requirements.
Price Analysis Techniques

Comparison of Proposed Prices Received

Less reliance should be placed on this technique when:

• The solicitation was made under conditions that unreasonably denied one or more known and qualified offerors an opportunity to compete.

• The apparent successful offeror has such a decided advantage that it is practically immune from competition.

• Another price comparison, cost analysis, or a cost realism analysis indicates that the apparent successful offer may be unreasonable (too high or too low).

• Buyer requirements permit offerors to propose widely different technical approaches to contract performance.

• All offerors are expected receive contract awards. In such cases, there may not be sufficient competitive pressure to foster fair and reasonable pricing.
Price Analysis Techniques

Comparison of Proposed Prices Received

Price analysis must adequately address:

- Responsibility and independence determination for all bidders
- Impact of factors that could affect comparison
  - Normal bid response rate
  - No uneven competitive playing field
- Justification of source selection
  - Best value considerations
Price Analysis Techniques
Historical Price Comparison

When previously proposed prices and contract prices are historical prices related to past purchasing activity to analyze price reasonableness, gets answers the following questions:

- Has the product been purchased before?
- What was the historical price?
- Was the historical price fair and reasonable?
- Is the comparison valid?
Price Analysis Techniques

**Historical Price Comparison**

Factors that may affect comparability include:

- Market conditions
- Quantity or size
- Geographic location
- Purchasing power of the dollar
- Extent of competition
- Technology
- Any unique requirements
Price Analysis Techniques

Historical Price Comparison

Price analysis must adequately address:

• Validity of comparison
  - “Similar to” justification vs. identical items

• Impact of factors that affect comparability
When using a Cost Estimating Relationship ("CER") to determine price reasonableness, get good answers to the following questions:

- Has the CER been widely accepted in the market place?
- Does the CER produce reasonable results?
- How accurate is the CER?
Price Analysis Techniques

Comparison to Independent Cost Estimate

• Establish the “independence” of the cost estimate!
• Answer the questions:
  - How was the estimate made?
  - What assumptions were made?
  - What information and tools were used?
  - Where was the information obtained?
  - How did previous estimates compare with prices paid?
Price Analysis Techniques

Comparison with Competitive Published Price Lists

Can be very useful in evaluating FAR Part 12 “commercial item” pricing; there are three levels of comparison:

1) Published price lists
2) Market prices
3) Other Sources
Price Analysis Techniques

Comparison with Competitive Published Price Lists

Price analysis must adequately address:

- Validity of comparison
  - “Similar to” justification vs. identical items
- Documentation of Sales Data to establish price reasonableness
  - Wholesale, retail, distributor prices?
- Catalog (or suggested) prices vs. prices paid
- Rebates, discounts, etc. for commercial customers?
Price Analysis Techniques

Evaluation of Data Other Than Certified Cost or Pricing Data

Does the price analysis adequately address the procedures employed in the evaluation:

- Labor
  - Hours, rates
- Materials and Other Direct Costs
  - Quantum - basis of estimate, reasonableness
  - Price - currency, reasonableness
- Indirect Costs
  - Basis of comparison, source of data
- Profit
  - Reasonableness
Price Analysis Tools
Price Analysis Tools

Price analysis tools should be used accordingly with the price analysis techniques previously discussed:

- **Inflation Adjustment**
  - Utilized when historical prices are out of date (not procured within the last 12 months)

- **Learning Curve Analysis**
  - Utilized along with other techniques when quantities are not comparable
Price Analysis Tools

*Inflation Adjustment*

- Requires the utilization of price indices
  - Published by the U.S. Department of Labor, Bureau of Statistics
    - Producers Prices: Material Price Indices
    - Average Hourly Earnings: Labor Wage Indices
    - Published by NAIC Classification

- Inflation is measured by comparing the current index to the forecasted index applicable to the historical price
  - Adjustments greater than 5 yrs. may not reflect changes in economic conditions of a product or service accurately
Price Analysis Tools

Learning Curve Analysis

- Price Analysis Techniques Supplemented by LCA:
  - Published Price Lists
  - Historical Prices
  - Similar Items
  - Independent Estimates

- Must be used when comparable quantities are not available.
  - Various quantities are considered comparable if no one quantity is less than half or greater than double the other quantity.
Price Analysis Tools

Learning Curve Analysis

- When production quantities are increased, LCA measures the efficiencies realized including:
  - Direct Labor Learning
  - Supervisory Labor Learning
  - Manufacturing Techniques
  - Production Process Improvement
  - Tooling/Equipment Additions
  - Management Systems
Price Analysis Tools

Learning Curve Analysis

- Two Basic Types of Learning Curve
  - The Labor Learning Curve: Reduction in hours resulting from follow-on production
  - The Material Discount Curve: Price in relation to the purchase quantity

- “Golden Rule”: The price or cost of an item tends to decrease by a predictable percentage each time the quantity is doubled
Documentation
## Documentation by Price Analysis Technique

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<th>Order of Precedence</th>
<th>Technique</th>
<th>Documentation</th>
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<td>Adequate Price Competition</td>
<td>Summarize All Offers</td>
</tr>
<tr>
<td></td>
<td>Catalog or Market Price</td>
<td>Include Copy of Published Price List and Commercial Sales Certification</td>
</tr>
<tr>
<td></td>
<td>Historical Price Comparison</td>
<td>Re-state Justification of Original Price</td>
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<tr>
<td></td>
<td>Similar Item Comparison</td>
<td>Reconcile Price Difference</td>
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<tr>
<td></td>
<td>Independent Estimate</td>
<td>Document Estimate in Writing</td>
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<td></td>
<td>Parametric Estimate</td>
<td>Document Source Relationship</td>
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<td></td>
<td>Pricing Information</td>
<td>Sales History to Other Customer</td>
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<tr>
<td></td>
<td>Cost Analysis</td>
<td>Include Cost Analysis Report</td>
</tr>
<tr>
<td></td>
<td>Management Review</td>
<td>Document Management Action Taken</td>
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</tbody>
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Price Analysis Documentation

It is the responsibility of the buyer/subcontract administrator to document the price analysis to show that a proposed price is fair & reasonable. Depending on the type of procurement, documentation should include:

- Purchase Award Summary
- Bid Summary
- Price Analysis Memorandum
- Negotiation Memorandum
Price Analysis Documentation

Purchase Award Summary

• Formal Documentation for purchases above the simplified acquisition threshold
  - Source Justification also required if the procurement is non-competitive (See FAR 6.303)

• The summary will need to include a price analysis or cost analysis if required by regulation 52.215-12
  Subcontractor Certified Cost or Pricing Data
Price Analysis Documentation

*Purchase Award Summary*

Key Guidelines:

- Tailored to each procurement
- Enough documentation to support adequate price competition, catalog price, or market price.
  - Separate price analysis memorandum may be necessary if other techniques are utilized
- Price Analysis results should justify fair and reasonable price.
  - If not, negotiation of a fair and reasonable price shall be performed and documented.
- If competitive, explanation of exclusion of non-large businesses required
A comparison table completed for competitive procurements

- Includes all suppliers that are solicited including no-bids, non-responses, and disqualifications

- Separate price analysis memorandum may be necessary if other techniques are utilized

- Summarize unit prices & NRE charges separately

- Award can be based on individual items, grouped items, or total quoted

- Quotes must be in compliance with solicitation requirements

- Document best value determination utilizing payment & FOB terms
Price Analysis Documentation

Price Analysis Memorandum

Typically required when utilizing the following techniques:

- Historical Prices
- Similar Items
- Independent Estimates
- Parametric Estimates

Level of detail in the memorandum will be dependent on the nature of the procurement, the dollar value, and the complexity of the item.
Price Analysis Documentation

*Price Analysis Memorandum*

Key Guidelines:

- Identify and quantify any price differentials (to be resolved in negotiations)
- Include proposed price, recommended price, and the basis for the recommended price
- Identify the price analysis technique utilized, requirements of the technique, satisfaction of those requirements with reference to supporting documentation
- Written, Signed, and Dated by the Buyer or Subcontracts Administrator
- Added as an addendum to the purchase award summary
## Price Analysis Documentation

### Price Analysis Memorandum

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<th>Price Analysis Technique</th>
<th>Typical Documentation of Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate Price Competition</td>
<td>Completed Purchase Award Summary inclusive of a bid summary</td>
</tr>
<tr>
<td>Catalog / Market Prices</td>
<td>Published List or specified identification of source supported by a Commercial Sales Certification (sold in commercial marketplace at similar prices/quantities)</td>
</tr>
<tr>
<td>Historical Prices</td>
<td>Previous Purchase Award Summary with analysis showing validation of price adjusted for quantity/inflation</td>
</tr>
<tr>
<td>Similar Products</td>
<td>See Above. Include Tech Eval.</td>
</tr>
<tr>
<td>Independent Estimates</td>
<td>Tech Eval, Subcontractor loading factors, salary survey</td>
</tr>
<tr>
<td>Learning Curve Analysis</td>
<td>Graphs, Calculations, Utilized Software Results</td>
</tr>
<tr>
<td>Pricing Information</td>
<td>Sales History with quantity, price, sales dates to others</td>
</tr>
</tbody>
</table>
Price Analysis Documentation

Memorandum of Negotiation

- Typically prepared for negotiated procurements above the simplified acquisition threshold
- Greater Detail when FAR 15 Certified Cost or Pricing Data applies
- Required to address the following:
  - Who negotiated the procurement
  - Which proposal was negotiated
  - When negotiations took place
  - Location of negotiations
  - Reasoning behind determination of negotiated price to be fair and reasonable
Price Analysis Documentation

Memorandum of Negotiation

- Price Analysis Techniques will inform the negotiation
- Programmatic and Technical Specialists should be included in negotiation
- Written, dated, and signed by the buyer or subcontract administrator
- Added as an addendum to the purchase award summary
**Sole Source Procurements**

**Non-Competitive Award Justification**

Possible justifications supporting non-competitive awards:

- Propriety Item / Process
- Engineering Directed
- Only Qualified/Approved Source
- Customer Directed (Documented in Writing)
- Economically Justified
  - Cost of Geographic Factors
  - Cost of Delivery Delays
  - Cost of Alternate Sourcing
- Unique Concept/Capability
- Follow-on Development/Production
- Regulated Utility
- Technical Compatibility
- Teaming Agreement
- Standardization
- Multiple or Dual Source
- Maintenance of R&D Capability
Sole Source Procurements

Non-Competitive Award Justification

• Price Analysis on sole sourced procurements should place additional emphasis on documentation and negotiation of the price

• The Justification must explain which category was used to determine the sole source and why that category is applicable to the procurement
Thank you for your attention!
Price Analysis

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