SD-5

Market Research Gathering Information About Commercial Products and Services



DEFENSE STANDARDIZATION PROGRAM

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Foreword

The Department of Defense (DoD) relies extensively on the commercial market for the products and services it needs, whether those products and services are purely commercial, modified for DoD use from commercial products and services, or designed specifically for DoD. DoD acquisition professionals must develop the knowledge and understanding of the industries and sectors that make up the global market for the products or services they support. Market research is conducted to determine the availability of commercial products and services, to identify market practices, and to become aware of the latest developments in products and services.

This document, an update of the SD-5 published in July 1997, contains practical information on market research leading to the acquisition of commercial products and commercial services. A key change in the 10 years since the SD-5 was last published is that the Internet has become the primary means for conducting market research.

Although this document emphasizes commercial products and services, the same market research techniques can be used when acquiring noncommercial products and services. In those cases, market research can help define requirements, identify alternatives, and monitor the industry for any new developments that may affect DoD.

The document is approved for public release. Electronic copies are available from the Acquisition Streamlining and Standardization Information System (ASSIST) at http://www.assistdocs.com or from the Defense Standardization Program Office website at http://www.dsp.dla.mil.

Gregory E. Saunders Director Defense Standardization Program Office

Background

The purpose of this document is to provide DoD and other Federal personnel involved in the acquisition process with practical guidance on using market research to ensure the acquisition of products and services that will best serve the government's needs. Specifically, this document is designed for personnel involved with establishing requirements for products or services, such as engineers, technical specialists, project officers, and customers; personnel involved with purchasing products or services, such as contracting officers, contract specialists, and cost analysts; and personnel who support the acquisition process, such as logisticians, testing and quality assurance specialists, and legal counsel.

What Is Market Research?

Market research, as defined in Federal Acquisition Regulation (FAR) Part 2, Definitions, is the process of collecting and analyzing information about capabilities within the market to satisfy agency needs. To elaborate, market research is a continuous process of gathering data on business and industry trends, characteristics of products and services, suppliers' capabilities, and related business practices. The data resulting from market research are analyzed and used to make informed decisions about whether DoD's needs can be met by commercial products or services. When making such decisions, several factors are considered:

- Degree to which commercial practices allow the products or services to be customized or tailored to meet DoD needs
- Terms and conditions, such as warranties, discounts, and customer support, under which commercial sales are made
- Ability of potential suppliers' distribution and logistics support systems to meet DoD's needs.

Market research information can be used to shape the acquisition strategy; to determine the type and content of the product description or statement of work; and to develop the support strategy, the terms and conditions included in the contract, and the evaluation factors used for source selection.

Why Do Market Research?

Federal procurement law and regulations require market research under certain circumstances.

Federal statutes found in the United States Code (U.S.C.)—41 U.S.C. 253a(a)(1), 41 U.S.C. 264b, 10 U.S.C. 2377, and 15 U.S.C. 644(e)(2)(A)—and implemented by FAR Part 10, Market Research, require agencies to conduct market research under the following circumstances:

- Before developing new requirements documents for an acquisition
- Before soliciting offers for acquisitions with an estimated value in excess of the simplified acquisition threshold
- Before soliciting offers for acquisitions with an estimated value less than the simplified acquisition threshold when adequate information is not available and the circumstances justify its cost
- Before soliciting offers for acquisitions that could lead to a bundled contract
- On an ongoing basis, and to take advantage to the maximum extent practicable of commercially available market research methods, to identify the capabilities, including the capabilities of small businesses and new entrants into Federal contracting, that are available in the marketplace for meeting agency requirements in furtherance of a contingency operation or defense against or recovery from a nuclear, biological, chemical, or radiological attack.

In addition, FAR Part 12, Acquisition of Commercial Items, requires that market research be conducted to determine the availability of commercial items or nondevelopmental items that could meet the requirements. This regulatory guidance implements the Federal Government's preference for the acquisition of commercial items contained in Title VIII of the Federal Acquisition Streamlining Act of 1994 (Public Law 103-355).

The above requirements apply to all Federal agencies. For DoD, the Defense Federal Acquisition Regulation Supplement (DFARS), Subpart 210.001, adds two additional circumstances under which market research is required:

- Before soliciting offers for acquisitions that could lead to a consolidation of contract requirements as defined in DFARS Subpart 207.170-2
- Before issuing a solicitation with tiered evaluation of offers (Section 816 of Public Law 109-163)

Even if market research was not required by law and regulation, it would be a smart business practice to follow. Market research is a commercial business practice, used by firms to identify trends, customer needs and wants, competitor practices, and sources for their purchasing needs.

Market research plays a key role in the requirements determination and definition process.

For example, when planning the acquisition of a new information technology (IT) system, DoD acquisition personnel receive the user's requirements for the system's performance, and sometimes the requirements are incompatible with each other or conflict with other systems. Through trade studies, market research can help users sort out what requirements can be fulfilled, what requirements can be fulfilled within cost objectives, and what requirements can be fulfilled given schedule constraints. By addressing all of these issues, market research allows the user to make informed decisions about the tradeoffs among all of the alternatives. Users who fail to consider these issues when defining the requirements risk investing in a system that may encounter technical difficulties during manufacturing or operation, have long production leadtimes, and be excessively costly to produce, operate, and support.

DoD personnel involved in the acquisition process also need to use market research to optimize the potential use of commercial items, commercial services, and nondevelopmental items to meet agency needs. DoD no longer relies extensively on government-unique products and services to meet its needs. Commercial products and services are increasingly the preferred choice when DoD (and the Federal Government in general) makes purchase decisions. This reliance on commercial products and services is due not only to the acquisition regulations, which encourage the use of commercial products and services, but also to business reengineering and outsourcing. DoD is focused on its core mission, national defense, with many supporting functions being handled by commercial firms.

In the service arena, many tasks that were once performed by DoD civilian or military personnel, such as maintenance and repair, logistics, and management support, are now performed by commercial contractors. In fact, the Federal Government, including DoD, awards more contract dollars each year for services than it does for products. Market research is essential for defining service requirements and learning about the capabilities of commercial firms to provide these services.

For many products, DoD research and development (R&D) no longer leads the commercial market. With the rapid technical advances occurring in the commercial marketplace, it is vital for DoD to understand those markets, identify the sources, and insert those technologies into weapons systems. In a global marketplace where all nations have access to the same technology, the military advantage will belong to those who can identify and capture state-of-the-art technology, get it into weapons systems, and successfully field those systems first. Using commercial products in weapons systems will also lower acquisition costs and shorten development time. Market research plays a critical role in identifying commercial products and sources.

In today's dynamic acquisition environment, in which use of commercial products and services is increasingly important and necessary, market research is a process used for doing the following:

Understanding commercial markets, competitive forces, and potential sources

- Finding solutions that satisfy agency requirements
- Identifying opportunities for using commercial items or services to meet agency needs
- Determining whether commercial products or services can be modified or adapted to meet the special needs of an agency
- Determining the availability of other nondevelopmental items to meet agency requirements (see SD-2, Buying Commercial and Nondevelopmental Items: A Handbook)
- Understanding product cycles and the way new technology is introduced into commercial products
- Developing product descriptions, statements of work, and statements of objectives that allow companies to offer their commercial products and services in consonance with commercial practices
- Shaping acquisition strategies, requirements, and tradeoffs
- Understanding the costs of various alternatives
- Developing support and test plans that accommodate commercial practices
- Determining the extent to which commercial markets can support other Federal Government objectives, such as providing opportunities for small and disadvantaged businesses, meeting environmental goals, and using domestic sources
- Crafting solicitation and contract terms, conditions, and evaluation factors that recognize commercial business practices and encourage competition.

When Is Market Research Done?

The answer to this question depends on the type of market research, as well as the type and complexity of the acquisition. Market research can be broken down into two interrelated, but distinct, types: strategic market research (market surveillance) and tactical market research (market investigation). Strategic market research involves a broad study of the market and sources, whereas tactical market research is focused on answering specific questions about products, services, or capabilities in the market. Both types of market research are discussed in more detail later in this document.

Strategic market research is conducted continuously throughout the acquisition process. It may take place even before an acquisition program exists and continue after it ends. Strategic market research enables acquisition, engineering, project management, and other personnel to stay informed about overall market developments, trends, and capabilities. During strategic market research, any identified users' requirements need to be kept in mind.

Tactical market research is conducted at specific points during the acquisition process, which will vary with the scope and complexity of the acquisition. Tactical market research is designed

to provide in-depth information to answer specific questions about the capabilities, products, or services available in the market. These questions are derived from the requirements definition. Users' requirements need to be continually considered when doing tactical market research.

In large, complex weapons systems covered by the Integrated Defense Acquisition, Technology, and Logistics Life-Cycle Process, market research is done throughout the acquisition process, beginning with the initial capabilities document developed during the concept development phase. In early phases, both strategic and tactical market research can be used to shape the acquisition process. The information gleaned from market research will affect the acquisition strategy, requirements definition, support and test plans, product description, statement of work, evaluation factors, and contract terms and conditions. Early market research is particularly significant because it could have a major effect on how the program unfolds.

Done early in the acquisition process—before the capabilities development document is validated at Milestone B, for example¹—market research makes it possible to compare the users' requirements to the capabilities of the commercial market and to determine the following:

- Availability of products to meet the requirements as is
- Ability of suppliers to modify their products to meet the users' requirements
- Flexibility of the users to modify their requirements to allow the purchase of commercial items, commercial services, or nondevelopmental items.

Such market research can be effective only with the understanding that comes from good up-front requirements definition.

Tactical market research must be conducted again later in the acquisition process to identify the correct set of performance characteristics for the product or service description (system specification, commercial item description, statement of work, or statement of objectives), the appropriate solicitation and contract terms and conditions, and the commercial practices affecting the support strategy and the acquisition strategy in general.

Figure 1 illustrates the use of strategic and tactical market research during a major weapons system acquisition. Strategic market research is a market monitoring process occurring continuously throughout the acquisition process. Tactical market research occurs periodically as needed to find specific solutions. (The figure shows tactical research as one distinct market research investigation occurring in each acquisition phase, but, in reality, multiple targeted investigations may be needed within a single acquisition phase.)

For system acquisitions, market research is iterative. If the initial market research leads to the conclusion that no existing system can meet the need, market research will be needed to iden-

¹For detailed information on the Defense Acquisition System and milestones, visit the Defense Acquisition Policy Center at http://akss.dau.mil/dapc/index.html.



tify commercial and nondevelopmental items that can be integrated as subsystems, components, and support equipment even though the overall system is military unique. Both FAR Part 12 and DoD Instruction 5000.2, "Operations of the Defense Acquisition System," instruct program managers and contracting officers to require contractors to incorporate commercial items or nondevelopmental items as components of systems developed for DoD.

During a major system acquisition, there will be many opportunities for market research to influence outcomes. As the system progresses from the concept refinement phase through the operations and support phase, many questions will need to be answered through market research. Also, acquisition of support services—R&D, engineering, test and evaluation (T&E), logistics and support, and training, to name a few—will require market research. Figure 2 illustrates this concept.

At the other end of the spectrum from major system acquisitions are the multitude of lowerdollar-value, standalone contracts for products and services. These might be for new products or services or for procurement of products or services furnished previously. For these acquisitions, strategic and tactical market research may be combined into a single effort that takes place before a solicitation is issued. The scope and effort of this market research will vary depending on the size and complexity of the acquisition, but in any event, the goal of market research remains the same: understand the commercial market and use commercial products, services, and practices to the maximum extent possible in order to gain the best value for the government.

Who Should Be Involved in Market Research?

The military services and defense agencies do not have a specific group of people called "market researchers"; instead, a wide range of people are called upon to perform market research related to their area of expertise. Your participation may vary, depending on your organization and the types of products or services for which you are responsible. On large and complex acquisitions, a team effort is usually the best approach, because many functional areas may need infor-

Figure 2. Market Research Opportunities



mation gathered during market research. Conversely, on small, low-dollar acquisitions, only one person may be involved in market research.

Consider the factors that will affect the success of the entire acquisition when you identify who must have input to the market investigation. What information is needed to make the decision to buy from the commercial market? To prepare the product or service description, you need to know the performance characteristics upon which products and services are valued and distinguished from one another. If a product needs follow-on support, such as spare parts and repair, you will need to know the characteristics of the follow-on support system. Is third-party testing used? What business practices are standard? What practices are standard for the insertion of new technology? The market research process lends itself to a team effort because of the many aspects that may be involved. The team may be composed of the following specialists as appropriate.

Technical Specialist

Depending on the stage of the acquisition and the type of acquisition, this person may be the program manager, the technical specialist, or the project officer.

The program manager defines and executes the acquisition strategy. He or she may join a market research team in the early stages of the acquisition, as the materiel developer representative, to better understand the analysis of alternatives and other market factors affecting the acquisition.

The technical specialist or project officer has overall responsibility for market research after concept development. That individual may translate the requirement into a product description

(commercial item description, statement of work, or specification). The technical specialist's base of knowledge of the product and industry ensures that the product or service meets the identified need. Because he or she identifies the potential tradeoffs and product modifications that the users and the potential suppliers will consider, the technical specialist must be extremely conscious of the cost-quality tradeoff.

User

The user—the customer—must be satisfied with the product's performance or the service provided. The user has four roles:

- Make the requirements as clear and precise as possible during requirements definition
- Evaluate whether the potential product can operate in the environment in which it must function (or whether the proposed service will satisfy the needs)
- Refine the requirement and consider tradeoffs to allow for the purchase of commercial items, commercial services, or nondevelopmental items
- Be actively involved throughout the market research process.

Market research is also important to the user during the preparation of initial capabilities and capabilities development documents. Market research allows the user community, in conjunction with the technical community, to identify acceptable risk or leading-edge technologies for systems to provide "leap-ahead" capabilities.

Logistics Specialist

The team may need a member who is experienced in support issues such as spare parts, maintenance, and warranties for the potential commercial product or service. Initiatives such as Contractor Logistics Support and Performance-Based Logistics are transferring many logistics functions to contractors. Market research may be required to address various aspects of procurements related to such initiatives. The logistics specialist can identify the information that needs to come from the market investigation on the existing support system and the support-related aspects of the product or service.

Testing Specialist

In a commercial item acquisition, the emphasis is on T&E and past performance, rather than on R&D. The testing specialist can use market research to obtain insight into the validity and relevance of outside testing results and to help specify the information that will be needed to address the criteria defined for operational testing. The testing specialist can also use market research to identify commercial entities that are capable of performing T&E services, as well as organizations that can accredit other quality assurance organizations. In addition, the specialist can evaluate whether a potential product can operate in the required environment.

Cost Analyst

The cost analyst can use market research to review and compare the affordability aspects of various alternative solutions to meeting a DoD requirement. The cost analyst may perform market research on cost or price factors in order to assist the contracting officer with evaluating offers.

Legal Counsel

Legal counsel can perform market research to determine whether commercial business practices (such as the Uniform Commercial Code) conflict with Federal Government contract laws and regulations. Counsel may also be called on to investigate trade-related issues, export practices, patents and intellectual property rights, corporate ownership and merger issues, labor practices, and other legal developments in the market that may affect the acquisition.

Contracting Officer

The contracting officer can use market research to identify information on market conditions, general business practices, company information, pricing, and the contract terms and conditions needed to successfully carry out the acquisition. For many smaller acquisitions, the contracting officer may be the only one who performs both the strategic and tactical market research.

Guiding Principles

From the preceding discussion, it should be apparent that market research applies to a wide variety of products and services across the Federal Government and to both highly complex systems acquisitions and routine purchases. There is no "one-size-fits-all" approach; market research must be adapted to fit the circumstances. Here, we present some guiding principles to keep in mind when designing a market research effort. These principles apply to most market research efforts regardless of size, scope, or complexity.

Start Early

Begin market research early, while the requirement is still flexible. In a major systems acquisition, begin market research prior to Milestone A, while the functional needs are being defined and in support of the initial capabilities document. Additional research will be performed later to identify subsystems or components during the design of development programs and to get more specific details about technical characteristics and market practices. On smaller, routine acquisitions, begin market research during the presolicitation phase when requirements are being developed and refined. Starting early helps to ensure that the user defines and documents the requirements appropriately.

If you are a technical specialist, a project officer, or another individual responsible for a product or service area, you will need to keep current with the latest developments in the market. You should consider market research to be a continuous process, occurring whether or not an acquisition program exists.

Define and Document Requirements

Early market research results are invaluable when negotiating reasonable requirements with the user. Market research information can help the user understand technological limitations and commercial practices. Documenting the range of alternatives will help the user define a set of requirements that will both meet the need while being technically feasible to produce under the constraints of time and budget.

Refine as You Proceed

The research should always proceed from the general to the specific. Start at the strategic level by examining the overall market, then move to the tactical level by using the information gained at the strategic level to focus your efforts. Acquire a little bit of information on many companies, and the products or services they offer, and a lot of information on the few products or services that seem likely to meet the requirement. The market research should be structured to acquire only enough information to decide whether to proceed to a more detailed examination of commercial possibilities.

Tailor the Investigation

The amount of time and money spent on market research should be related to factors such as the value of the acquisition, the complexity of the product or service, the use of the product or service, and the commercial potential. If market surveillance information tells you there is little potential for commercial use, further market research should be minimal. If commercial potential is high, an extensive market investigation may be appropriate.

Repeat as Necessary

Think of market research as an iterative process. Successful market research often requires multiple efforts. Market research is first used to determine the availability of commercial capabilities, practices, products, and services to meet the general requirement. It must also be conducted later to identify commercial components available for incorporation into systems developed for DoD and to get more specific, detailed information to make various acquisition decisions. Markets are dynamic. What was impossible in the past may now be feasible.

Communicate

Good communication across functional areas and with industry and users is important to the success of a market investigation. For this reason, an extensive market investigation may work best as a team effort. Linking the team members' experience and areas of expertise with the information gathered will guarantee more balanced, best-value decisions. In communicating with industry, broaden your efforts to include forums that are typically used by the market, not just the ones traditionally used by the Federal Government.

Involve Users

Remember to involve users (the customers) in the market research process, not merely in defining the requirement. Users can be active participants in the market research for some products and services or testers for others. Try to involve users formally in working groups, but also maintain informal lines of communication between them and the market analysts. Users in the field may have access to new technology and new product information that needs to be conveyed to those who define requirements. Users also play a major role in identifying problems with the current equipment or service. Users establish what they need and want from a product or service. Market research can let users know whether their needs and wants are feasible or affordable. With this knowledge, users can make tradeoff decisions and refine their requirements.

The Market Research Process

Market research can be viewed as consisting of two parts or phases: strategic market research, also called market surveillance, and tactical market research, also called market investigation. The delineation between where strategic market research ends and tactical market research begins is not clear-cut. Generally, however, strategic market research is an ongoing process that focuses on finding information about the broad market. It can be done independently of any specific acquisition requirement, as well as in conjunction with one. Keeping current with the latest developments in the market is one example of strategic market research.

The information gained from strategic market research can be used to focus the efforts of tactical market research. Tactical market research is conducted in response to a particular need or acquisition and is designed to answer specific questions. It is more focused and in-depth than strategic market research. The scope will vary based on factors such as the market, the size and complexity of the acquisition, and the type of information sought. Figure 3 illustrates this concept.

For most market researchers, the Internet is the preeminent source of information. Through the Internet, you can research a vast topic relatively quickly. Internet searches provide leads to explore. And the sources uncovered are, for the most part, current. Moreover, much of the in-





formation on the Internet is free. However, some resources require subscriptions, per-use charges, or other fees; costs vary with the type of information provided, the number of services (resources) used, and the number of users in your group or office. Appendix A lists some of the types of information available on the Internet; some types are useful for strategic market research, some for tactical market research, and some for both. Appendix B lists some of the many sources of market research information available through the Internet; the list might help you narrow your market investigations to those that come closest to meeting your requirements.

Ultimately, the goal of both strategic and tactical market research is to provide acquisition personnel with enough knowledge about the market to make good decisions. Market research will have a significant impact on the acquisition strategy, the requirements, and the business processes needed to successfully contract for the desired product or service. Below, we address the specific steps required for both types of research.

Strategic Market Research (Market Surveillance)

Strategic market research involves activities that result in a broad understanding of markets, technologies, business developments, and the products or services of interest. Strategic market research is an ongoing process and is usually not focused on a single acquisition. The goal of strategic market research is to develop a base of knowledge about the market area of interest and its products or services. This base of knowledge can then be applied to one or more acquisitions to help focus the more detailed tactical market research.

Strategic market research helps you to stay abreast of the latest developments in the market area of interest, including the latest technologies, business trends, products, services, and business practices. By conducting strategic market research regularly, you will be better positioned to assess the capabilities of the market to provide the desired products or services. This knowledge is invaluable when developing the initial acquisition strategy, well before actual requirements are in place. Decisions made early in the acquisition process will shape all that follows, so conducting strategic market research is critical to the success of an acquisition program.

Strategic market research has four major steps, summarized in Figure 4. Each of the steps is discussed below.

Identify the Market or Market Segment of Interest

The first step in conducting strategic market research is to identify the market or market segment of interest and to scope out the task. Answering the following questions will help get you started.

Are you interested in a product or a service? At the strategic level, the research that you do will be similar regardless of whether a product or a service is involved. However, you will need to tailor the research somewhat. For example, when looking at product markets, you will want

Figure 4. The Four Steps of Strategic Market Research



to investigate factors such as technologies, manufacturing and production processes, and logistics. For services, you will need to investigate the performance requirements that affect quality, labor factors such as availability and required skills, and the approach to delivering the service.

What are the requirements? At the early stages in an acquisition program, the requirements may not yet be defined. In that case, you will need to take a much broader look at the market in order to identify alternatives. On the other hand, if you know the requirement will involve only reciprocating pumps, then you can limit your efforts to that market segment.

Who are the participants in the market? Who are the sellers? Who are the buyers? Is the Federal Government currently a buyer? Are there dealers or distributors? Do industry or trade associations play a role? Do other markets affect or have a relationship with the market of interest, such as suppliers and transportation? Are there any consortia? Do nonprofit or educational



organizations play a role? Are subcontractors used? Has outsourcing of the product or service taken place? Do any international organizations, including foreign governments, participate in the market? Are there lobby organizations? Are standards organizations involved in the market? Are other parts of the Federal Government involved in the market, for example, labor, health, environment, safety, or R&D labs? By answering these questions, you will identify the stake-holders in the market and help define the scope of your strategic market research effort.

Identify Sources of Market Information

Once you have some idea of the market you wish to research, you will need to identify sources of information to help answer the questions above. Much of strategic market research can be accomplished by using the resources available on the Internet. If you're not sure where to begin, searching on the product or service of interest using one of the many web search engines can lead to many useful links.

If you are very familiar with the product or service to be acquired, you are probably well prepared to do the market research using the various types of Internet resources. However, if your time is limited or you are not very familiar with the product or service, then you might want to consider employing a professional research service. For example, Dialog offers a variety of research solutions. Other search services include LexisNexis and Westlaw. These services generally have access to more information than you can get through an individual search of the Internet; however, a search service can be expensive.

In addition to information available on the Internet, you also should consider the following sources:

• Other government customers. Do other agencies purchase the product or service of interest? These users may be very well informed and an excellent source of information. A general web search may uncover links to other government users, but you should also look at contracting resources such as the Federal Business Opportunities (FedBizOpps) website and the Federal Procurement Data System-Next Generation (FPDS-NG). You can search FedBizOpps for current and past requests for proposals (RFPs) and contract award announcements in all the product and service areas, and thereby identify any government customer. FPDS-NG, FedSpending.org, or a commercial subscription service that uses data from FPDS-NG can provide contract award information, including the awarding office, for all products and services that the Federal Government purchases. If you are looking at research programs, also consider searching the announcements at Grants.gov; although most announcements on Grants.gov will result in a grant as opposed to a contract, you may find agencies that are involved in similar research or programs. By using these resources, you will be able to identify other government stakeholders in the market, and find others, such as government laboratories, who can share their knowledge of the market with you.

- Economic data. A strategic market research study should include a review of basic economic data about the market. The data may include industry sales and trends, number and sizes of the participating firms, and any other industry information that is relevant. Sources to consider are data from the U.S. Census Bureau, Bureau of Economic Analysis, and Bureau of Labor Statistics; industry and trade associations reports and publications; purchasing publications; and news and business publications.
- General market information. Other sources of information about the market include trade shows and conferences, training programs focused on the market, industry and trade associations and publications, organizations that establish standards for the market, and the news media. Personal contacts are another valuable source of information. Site visits to suppliers of products and discussions with other users can help you get a better feel for the realities of the industry than you can get by relying solely on media such as advertising brochures. You can also publish a request for information (RFI) in FedBizOpps to seek general information from firms in the market, although an RFI may be more appropriate once you've learned more about the market and have begun your tactical market research.

Collect Relevant Market Information

After you have identified potential sources of information to support your strategic market research, you must then decide what information is important enough to collect from those sources. This is a matter of judgment. Your decision will depend on the market you're researching, the nature of the product or service, and your role in your organization.

A key aspect of collecting strategic market research data is to first develop an organized structure for storing or capturing the information so that you can find it quickly. You could use web bookmarks or favorites, folders and files on a computer or network, hard-copy file folders or binders, or some combination. Web bookmarks and folders are convenient when the research is conducted via the web, although web bookmarks can become inactive over time as the underlying websites are deleted or revised. You could transfer, cut-and-paste, or enter data onto forms, documents, or databases that you store on your computer or network; the disadvantage with this approach is the labor and time to extract and replicate information from the sources. Hard-copy files are useful for organizing material from brochures, magazines, printouts, or other physical media.

You will probably use one or more approaches for storing the market research data unless you want to invest in the effort to convert the various types of information into a common storage environment. For example, if the market you are researching is jet engines, you might want to create a structure like the following:

Jet Engines

- Technology Development
- Economic Data
- Business News.

Information on the latest engine technology, materials, manufacturing processes, quality, and so on could go under the Technology Development folder. Under the Economic Data folder, you might capture information on industry sales, trends, pricing, and labor. Under the Business News folder, you could capture information on the companies that constitute the market, mergers, spinoffs, outsourcing, trade issues, and legal developments. You could create additional subfolders to target specific areas. And because strategic market research should be ongoing, you could further subdivide the folders to capture the information yearly. The main objective is to create an organized system for collecting and storing the results of your strategic market research so that the data can be easily pulled together and used as a starting point for in-depth tactical market research.

Document the Results

Having an organized structure for collecting and storing strategic market research data is only half the battle. Once the information is collected, you should then analyze and document the results, and you should communicate your results with others as necessary. Because strategic market research is ongoing, even when no specific acquisition program is in place, it is easy to overlook the importance of documenting your findings—and often difficult to find the time to do so. However, documenting your strategic market research findings offers several important benefits:

- Good documentation helps team members develop an overall picture of the market.
- If you leave your position, good documentation allows your successor to quickly get up to speed on the market.
- When important developments occur in the market, good documentation allows the findings to be communicated with other stakeholders.
- When a new acquisition is contemplated, good documentation of strategic market research saves time and resources and helps focus the efforts of tactical market research.

There are no mandatory formats or requirements for documenting the results of strategic market research. Strategic market research being conducted as part of an acquisition should be documented in accordance with the agency or program requirements. For ongoing strategic market research, documenting the findings at least annually is recommended. The following headings represent a suggested starting point for documenting your findings:

Time period covered

- Market research team members or individual who prepared the report
- Companies contacted, questions asked, summary of information provided, test results, and evaluation of products or services
- Market developments, broken out into specific areas if desired (for example, each team member could have a section related to his or her specific area of research)
- Impact of the findings on the Federal Government
- Recommended actions based on research findings, for example,
 - investigate a new manufacturing technology to determine its applicability to government acquisitions,
 - identify production issues that might affect future government needs,
 - train government personnel in a new commercial quality assurance process, or
 - alert other stakeholders to issues or new developments.
- Actions completed in response to the market research findings.

Commercial markets are often fast paced and evolve rapidly. Using a structured approach to collect and document strategic market research results will enable DoD to gain the most benefit from commercial markets.

Tactical Market Research (Market Investigation)

Tactical market research involves activities that result in an in-depth understanding of a market. Tactical market research is conducted during an acquisition process to answer specific questions about the market, suppliers, products, services, and so on in order to shape the acquisition strategy. Tactical market research builds on the results of ongoing strategic market research, using those findings to help identify targets for more in-depth research.

The tactical market research process has seven steps, as shown in Figure 5. Each step is discussed below.

Summarize Strategic Market Research

Part of the value of strategic market research is that you are better prepared to do an efficient tactical market investigation in the limited time you have when faced with an acquisition. The first part of a market investigation is to review and summarize what you already know from your strategic market research. In this part of market investigation, good documentation of your strategic market research pays dividends in time and cost savings. Considering your previous findings, you can now target the tactical market research to answer specific questions and to fill in gaps in information. Also, communicating requirements to industry is integral to conducting

Figure 5. The Seven Steps of Tactical Market Research



successful tactical market research. Information must reach industry early to give vendors an opportunity to identify potential commercial products or services. It is important to communicate requirements in a manner that industry can easily and fully understand. It is also vital to describe the operational environment because it may differ from the commercial environment.

Formulate Requirements

Before beginning the detailed look into sources to meet the requirements, you should formulate and define those requirements in greater detail. The results from early market research should be sufficient for acquisition personnel to determine whether the user's initial concept and requirements are feasible. Early market research should also point to possible alternatives, either material or nonmaterial, to meet the user's need.

Documenting the results from early market research will allow the user and acquisition personnel to discuss the various alternatives, assess risk, make tradeoffs, and negotiate and clearly define the requirements upon which the acquisition will be based. Clearly formulating the requirements through discussions and negotiations between the user and acquisition personnel will pay dividends in time and money saved as the acquisition moves from concept refinement through production and deployment, as well as in the operations and support phase. Clear and thorough requirements documents, which describe the user's needs, are essential to a successful tactical market investigation. Only by understanding the requirement can you focus the tactical market research appropriately. Requirements documents may vary in format depending on the size and complexity of the requirement, but must clearly list or describe the user's requirements in a structured or formal manner. Once you have reviewed the requirements documents and have an understanding of the requirement, you can orient your tactical research to target specific types of information. Appendix C contains examples of the types of information you may need to collect.

Identify Sources of Information

If you've been conducting strategic market research regularly, you probably know many of the sources for the product or service you're interested in. If not, you may have to conduct additional research to identify the firms that are potential suppliers. Some markets may have only a few or even just one source for the product or service. Other markets are highly competitive, so many sources may be available. The amount of time and effort you put into identifying sources is a judgment call. Consider the value of the acquisition and the potential benefits of locating a new source.

Adding new potential sources to a list of suppliers increases competition, which can lead to better products at lower costs for DoD. If this is the first attempt to meet the requirement with a commercial item, more effort may be required to identify as many potential sources as possible. You may need new techniques to reach sources that have not previously dealt with the Federal Government.

The list of sources starts with information obtained during market surveillance. Known suppliers and those who have bid on contracts in the past constitute a basic list. You can identify such suppliers by searching the contract award data in the Federal Procurement Data System– Next Generation or by using a commercial subscription service that packages FPDS-NG data into easily searchable databases. For some products and services, the General Services Administration schedules will identify sources. Announcements of "Sources Sought" or "Request for Information" in FedBizOpps often produce a good response; however, the announcement might be seen only by firms that have done business with the government in the past. To reach suppliers that have not previously bid on government contracts, try advertising on electronic bulletin boards, on the Internet, through trade associations, or in trade publications, which are used by commercial firms seeking new business. Almost every industry has some established structure for helping buyers and sellers find one another. Advertise where the commercial buyers do.

Commercial databases can also help generate a list of potential suppliers. Databases covering commercial products and suppliers may specialize in one industry or may include products from many industries. Dun and Bradstreet offers subscriptions to a web-based resource called Global Reference Solution, a database of more than 100 million businesses throughout the world. ThomasNet is an online resource offering a directory of global industrial suppliers and product information. Several database products are based on the information contained in the Federal Catalog System. Those databases relate part numbers and national stock numbers to sources. Similar catalog databases covering commercial products are also available.

Performing basic web searches for the product or service desired is another way to uncover commercial sources. You may find a great deal of marketing information, catalogs, and basic information about the product or service available from the company's website.

Finally, consider conferences and trade shows where suppliers have booths to advertise their products or services. Firms may offer the opportunity to see and demonstrate the product or service, offering valuable insight into their capabilities.

Collect Product or Service Information from Sources

Once you've identified potential sources for the types of information you need based on requirements, you can begin collecting data about the product or service of interest. The following are some methods you can use to obtain information:

- Search the supplier's website and extract relevant data. The website may include catalogs, product or service descriptions, references, application data, warranty information, business terms and conditions, and other information that you need.
- Contact a supplier representative by telephone, e-mail, or letter. It is not uncommon to get incomplete or erroneous data from a supplier, so direct dialog with a company representative may help clarify issues. This method has the advantage of a two-way communication in which you can ask specific questions and get information that might not be available otherwise.
- Prepare a formal survey or questionnaire and send it to multiple suppliers. Suppliers also can be surveyed by telephone or through a web interface. A formal survey should have an introductory letter explaining the purpose of the survey. Because of statutory limitations on data collection, you should request only the minimum information needed to answer your questions, and you may have to follow up with suppliers who did not respond or responded with incomplete or ambiguous information.
- Review printed company literature such as sales brochures and catalogs.
- Hold presolicitation conferences to discuss planned requirements with industry members.
- Circulate draft product descriptions, statements of work, and requests for proposals for comment by potential sources.
- Issue a "Request for Information" or a "Sources Sought" notice in FedBizOpps.
- Conduct government/industry off-site meetings.

To get the most useful information from potential sources, you should first provide them with information about the requirement. Table 1 is an example of the type of information you might want to provide about a requirement for an IT system. Again, you should provide only the minimum information necessary to obtain the answers you need.

Category	Type of information
General information	Operating characteristics for hardware or software
	Environmental conditions for use
	Anticipated use (fixed, airborne, tactically deployable)
Services information	Description of services desired
	Period of performance
	Expected deliverables
	Expected labor categories
System interface or integration requirements	Computer language, speed, throughput, ports, memory, and expansion potential
	Radio transmission frequency requirements and allocation status
	Rules for government use of frequency spectrum
	Human factor considerations
Maintainability	Self-test requirements
	Limitations, if any, on organizational-level support equipment
Communications/computer system	Software portability to other communications/computer systems
interfaces	Operating duty cycle (full time, intermittent)
	Input power quality (drops, surges, spikes, noise)
	Essential safety characteristics
	Reliability, maintainability, and survivability
	Nuclear hardening requirements
	Chemical, biological, and radiological survivability
	Electromagnetic compatibility
Logistics support	Planned maintenance echelons
	Maintainer proficiency levels
	Software maintenance plans
	Limitations on evacuation of reparable items (battlefield,
	underground, rough handling)
	Maintenance environment (high winds, mud)
	Supply support, support equipment needs, and limitations
	Training needs
	Technical data needs
	Transportability

Table 1. Example of the Type of Information to Provide to SourcesAbout a Requirement for an IT System

The techniques used for tactical market research are similar regardless of whether the requirement is for a product or a service. However, some differences affect the areas of focus during the data collection process. Products lend themselves to objective descriptions of their physical characteristics, performance data, estimated service life, and other factors. This tendency simplifies the collection of data about products and can make it easier to compare products from different manufacturers.

Services, on the other hand, require the effort of a contractor to perform a task as opposed to furnishing a product. Services can vary greatly and may be customized for the task required. Consider a simple example of a task to paint the interior of an office. Does the service include repair of any existing damage to the walls and trim? Will it require priming and sanding? Will one or two coats of paint be required? Should cleanup be addressed in the contract? Are the paint and other supplies included? Is there a standard for how long the job will take? The details of what is included in the service can make it difficult to compare the services from different companies. You need to be familiar with the government requirements for the task in order to describe the needed service to prospective sources and to evaluate the service offerings of different firms.

In addition to a description of the product or service, you need to consider its quality. For products, quality can usually be described in objective terms based on product test results, tolerances, materials, and product history. For services, quality is more subjective and can be difficult to ascertain. Past performance is paramount. Service providers may have multiple levels of the same service, such as basic, standard, and premium. You will need to understand what distinguishes the various levels of service. Many service sectors are governed by regulatory standards or have their own standards to which they voluntarily adhere. These standards describe the minimum performance you can expect. So if the standard meets your requirement, you can be reasonably confident that a number of companies can provide the needed services. The standard will also provide acceptable quality levels, if they exist. An acceptable quality level establishes the maximum allowable error rate or variation from the standard. For example, a standard for main-tenance services may require that a particular maintenance action be completed in 4 hours, with an acceptable quality level of 5 percent. That is, the service may take more than 4 hours only 5 percent of the time. This information is important because, unlike products, services can rarely be delivered 100 percent to standard.

To verify the claims of the potential sources, you should request the names of current customers of the product or service. If the source had previous government contracts for the same or similar product or service, you should ask for the following information:

- Contract number
- Title and objective of contract
- Contracting agency and point of contact information

- Period of performance
- Value of contract
- Type of contract (fixed price, cost reimbursement)
- Accomplishments of effort (products furnished or services provided).

As you start collecting information from potential sources, you should also be thinking about how you are going to capture and organize the information. If you are collecting information from multiple firms, consider setting up a database or spreadsheet with fields to record the key elements. A database or spreadsheet allows you to sort and filter the data in various ways, which aids analysis. If the information you are collecting is mainly qualitative or narrative, a table in a word-processing document may be sufficient. If you plan on gathering data via phone conversations, an interview guide or template will help ensure that you cover all the areas you intended and will help you to capture the data. Whatever data collection methods you use, a good system for capturing and organizing the data will help you to analyze and document the results of your research.

Table 2 compares the market research focus areas for products and services.

Collect Information from Product or Service Users

Following up with the references provided by the product or service sources is the next key step. Feedback from the actual users of the product or service allows you to assess how well the product or service performed in the past and to identify any issues. One approach to collecting information from product or service users is to interview them either in person or by phone. In some cases, e-mail correspondence may be sufficient.

Private-sector users are often willing to discuss good and bad features of products or services. DoD experts can question their private-sector counterparts to get additional technical knowledge and to make an informed judgment on whether it meets DoD's need. For example, the logistics representative on the team could interview maintenance personnel who have experience with the product to determine what their maintenance philosophy is, how much maintenance is needed, whether parts are easy to replace, and so on.

Because a source is unlikely to knowingly provide you the names of users that are dissatisfied with the product or service, you should also attempt to independently identify users. Information collected from them may be far more useful for verifying the sources' claims.

You can also review customer satisfaction data from reliable sources like government databases, consumer protection organizations, and user groups. Keep in mind that at this point, the goal is not to select or eliminate any potential sources. That will be done during the acquisition process when offers are evaluated.

Table 2. Examples of Market Research Focus Areas for Products and Services

Products	Services
<i>Product data.</i> Product performance and interface characteristics; applicable regulatory, commercial, and de facto standards; open system definitions; product-differentiating factors; cost-driving factors; test results; samples; product literature such as product data sheets, independent test reports, and product instructions.	<i>Service data.</i> Tasks included in the service; service levels; acceptable quality levels; use of government, industry, or company standards; related or ancillary services; costs; labor.
<i>Supplier capability.</i> Number of suppliers in the market, production capacity, producer's capability to meet surge and mobilization demands.	<i>Service delivery.</i> Geographic coverage (local, re- gional, national, or international); actual service provider (company employees, subcontractors, or independent consultants); availability of service (for example, round-the-clock or business days only).
<i>Market acceptance data.</i> Annual sales, market share, product maturity, returns on warranty, other data related to whether the product meets government needs.	<i>Market acceptance data.</i> Annual sales and growth trends, market share, number of customers using the service.
<i>Support data.</i> Product support records, experience, and support system; warranties; repair histories; policies and procedures on repair and replacement; support of or upgrades to discontinued models; length of time that particular products will be produced or supported; approach to providing upgrades.	<i>Customer support.</i> Inclusion of on-site customer service representatives, dedicated customer repre- sentatives, help lines, availability to meet sudden changes in customer needs.
<i>Test data.</i> Test results (from the supplier's or an in- dependent laboratory), regulatory or third-party testing or certification (for example, Federal Avia- tion Administration or Underwriters Laboratories, Inc.). (Test data can be used to validate suppliers' claims regarding product performance. In some in- stances, test data can eliminate or reduce the need for further testing.)	<i>Training and certification.</i> Company, industry, state, and national training or certification requirements for the personnel performing the service; use of the latest business processes or technologies to improve the service and provide value to the customer.
<i>Business practices.</i> Standard commercial contract terms, conditions, and pricing arrangements for commercial acquisitions using procedures in FAR Part 12; factors affecting how products are sold or distributed in the market (such as commercial supply chains).	<i>Business practices.</i> Standard commercial contract terms, conditions, and pricing arrangements for commercial acquisitions using procedures in FAR Part 12; structure of service contracts such as use of performance-based statements of work, performance metrics, performance incentives, and quality assurance plans.
<i>References.</i> Entities using the product. (The references are used to verify the information submitted by the supplier and to get other users' views on how the product performs.)	<i>References.</i> Entities using the service. (Service quality is crucial, so checking references of current service users is vital to understanding how the service provider is performing.)

Another way to verify a source's claims about a product is to test samples. When it is feasible to do so, personnel should test the product in the field to determine whether it meets performance claims and operates satisfactorily. The military service or component may wish to rotate the product through several units to get feedback from a number of people. To verify a source's claims about a service, you may be able to visit a user's facility to see the results of the service.

Evaluate the Data

After you've completed the data collection process, you need to evaluate the data to determine whether the information received is sufficient to determine whether the product or service meets the needs of the requirement. It is not uncommon to get incomplete or erroneous data from suppliers. In some cases, you may need to contact an applications, field service, or design engineer for clarification of issues. You may also need to appraise the data using market surveillance information, analyzing market trends to fill in missing data. For example, you can estimate the length of a product cycle for a product for which you have no data by analyzing comparable products for which data exist.

As a result of your data collection efforts, you may determine that

- a commercial product or service is not feasible,
- commercial products or services meet the need as stated,
- commercial products or services can meet the need if certain requirements are relaxed, or
- commercial products or services could be modified to meet the requirement.

To easily evaluate the data you have gathered about a product or service, you should use a table, database, or spreadsheet. Here, we provide two simple examples. The first is for a product, a hand-held receiver for a global positioning system (GPS); the second is for pest removal service.

Table 3 shows a sample comparison of the characteristics of four GPS hand-held receivers; it also shows the characteristics required by the government. In this example, it's clear that the commercial market can meet all of the government's requirements except for battery life. Further research may be needed to determine whether it is technologically feasible to meet the requirement and what the cost implications are. Perhaps the government user would be willing to trade off this requirement, or perhaps the requirement can be met through other means, such as having the user carry an extra set of batteries. In situations such as these, it is very useful to have an individual who is responsible for the operational requirement on the market investigation team. You may avoid reducing the candidate field or eliminating a commercial solution by relaxing or deleting the problem requirement if, in the judgment of the user, that is a reasonable thing to do.

If the user is unwilling to relax or eliminate a particular requirement, then ask the candidates about the feasibility and cost of modifying their product to meet the requirement. Some suppli-

Item	Weight (ounces)	Dimensions (inches)	Battery life (hours)	Display	Memory	Warranty	Accuracy (meters)
Government requirement	≤8	5.5 H max 3 W max 2.5 D max	30	Gray scale	24 MB	_	≤5
Supplier A: Product 1	7.7	4.5 H 2.4 W 2.2 D	16	Color	64 MB	1 year parts and labor	≤3
Supplier A: Product 2	6	4.3 H 2.5 W 1.9 D	25	Gray scale	32 MB	1 year parts and labor	≤5
Supplier B	8	4.8 H 2.7 W 2.5 D	20	Gray scale	16 MB built-in, additional via SD memory card	1 year parts; 90 days labor	≤5
Supplier C	8.2	5.2 H 3.2 W 2.2 D	18	Color	64 MB	2 years parts and labor	≤7

Table 3. Sample Comparison of GPS Hand-Held Receivers

ers routinely modify their products for their commercial customers. Another possibility is that the suppliers will see that the modification would be commercially marketable and be willing to make the modification in anticipation of a return from the commercial market.

These kinds of tradeoff analyses are important tools in establishing a pool of candidate sources that represent the overall best choices. In some cases, it may be economically feasible to develop techniques that mitigate the risk of using commercial items that do not fully meet the requirement. For example, a commercial alternative may not satisfy a particular reliability requirement (e.g., 300 hours mean time between failures). However, a tradeoff analysis might demonstrate that other equipment capabilities or performance would compensate for the reliability shortfall. Or, if cost savings per unit were sufficient, redundancy or a dispose-and-replace policy might compensate for the shortfall. You can use similar analyses to evaluate processes, production methods, and production control procedures. It is usually better to accept or tailor these processes, methods, and procedures rather than to impose totally new procedures that will drive up risk and cost.

Modifying a product can increase program risk, because modification of a commercial item may result in a partial development effort. Many of the cost, risk, schedule, and supportability benefits of buying a commercial item may be jeopardized as a result of modification. The test and logistics support plans must account for the scope of the modification to ensure success. Evaluate the total effect of modifications, particularly in the area of logistics support. For example, a supplier may not recognize or support the resulting redesigned product, and DoD may have little or no organic support capability for it. Table 4 shows a sample comparison of five pest removal services; it also shows the characteristics required by the government. In this example, the government did not specify any quality assurance requirements. The market research showed that firms in this industry adhere to various standards. Further research into this area will aid the government in establishing quality assurance requirements for the final requirements that appear in the actual solicitation.

Item	Services offered	Geographic coverage	Contract basis	Service availability	Certified employees	Quality assurance
Government requirement	Insects, mammals	Regional	Fixed price	Within 48 hours	Yes	_
Supplier A	Insects, birds, mammals	National	Fixed price; annual contract	Within 24 hours	Yes	ISO 9001
Supplier B	Insects, birds, mammals	Local	Fixed price; annual contract	Business hours, 5 days a week	Yes	Industry association service standards
Supplier C	Insects, mammals	Regional	Time and materials	24 hours	Yes	Company standards
Supplier D	Insects	Local	Fixed price	Within 12 hours	Yes	State govt. standards
Supplier E	Insects, birds, mammals	National	Various: fixed price; time and materials	Within 24 hours	Yes	Industry association service standards

Table 4. Sample Comparison of Pest Removal Services

Services can be easier to tailor or adapt to the user's needs than products. Whereas adapting a commercial product might require costly engineering, design, and production changes, adapting a service might require only a change in a business process. In some cases, the commercial service may include related tasks that the government customer had not considered. In any event, a thorough understanding of both the government's needs and the supplier's capabilities are necessary in order to develop a good statement of work for the actual solicitation.

As demonstrated by these two examples, you may conclude from your evaluation that a commercial product or service is not feasible; that commercial products or services meet the need as stated; that commercial products or services can meet the need if certain requirements in the original statement are relaxed; or that commercial products or services could be modified to meet the requirement.

You may also determine that additional steps are needed to properly evaluate the products or services identified through market research. For example, environmental or conformance tests may be needed to determine whether the product meets particular aspects of the requirement, or site visits may be needed to determine whether the supplier can provide a consistent product or service.

Document the Results

Documenting the results of the market investigation is a critical aspect of the process. FAR Part 10 states that agencies "should document the results of market research in a manner appropriate to the size and complexity of the acquisition." The results should also be documented in a manner appropriate to how they might be used in the future. That is, the type and amount of information you keep should be based, in part, on how you expect it will be used in the future.

Documentation serves several purposes. First, it provides a historical record of the market research effort and provides evidence that proper market research was conducted for the acquisition. Second, other market research teams investigating similar products may use it to get a feel for what might be available and to get ideas on where to start their investigation. Third, the contracting office working on the solicitation for your acquisition may use it to further determine appropriate contract terms and conditions.

Early market research must also be documented during development of the technical opportunities and user needs prior to Milestone A and further documented in the capabilities development document prior to Milestone B. DoD Instruction 5000.2, "Operation of the Defense Acquisition System," indicates that market research is a statutory information requirement for both Major Defense Acquisition Programs (MDAPs) and Major Automated Information System Acquisition Programs (MAIS). This instruction requires the evaluation of requirements based on the potential of the commercial market to meet the users' needs.

There is no standard format for documenting your market research results. You should follow your organization's or program's guidance for preparing your report. The following are topics that you should consider addressing in the report:

- Background for the market research effort
- Time frame in which the market research was conducted
- Team members and other stakeholders involved in the market research
- Description of the requirements
- Estimated time frame or schedule for the requirement
- Summary of strategic market research findings, including trends, competition, recent developments, issues, and so on

- Summary of the scope of the market research effort, including the questions to which answers were sought, the information requested from potential sources, methods used to obtain data, and so on
- Discussion of potential suppliers, including recent government contracts for the same or similar product or service
- Discussion of product or service characteristics obtained through data collection, including any shortfalls in meeting the government requirement
- Discussion of commercial business practices, procedures, terms, and conditions
- Discussion of cost or price factors uncovered during the investigation
- Discussion of quality factors, including such issues as past performance, references, product testing or evaluation, customer satisfaction, warranties, and quality problems
- Actions taken as a result of the market research
- Recommendations.

Other Considerations

During your market research, you should keep several things in mind.

Amount of Information to Gather

The scope, extent, and documentation of a market investigation depend on such factors as the anticipated dollar value of the product or service, its complexity, its criticality, and the number of items needed or extent of the service required. The generic market research process described in this document is sufficiently detailed to apply to complex, high-value products or services. However, not all parts are necessary for all acquisitions; the process should be tailored to the specific market information needs of your acquisition and the potential for commercial products or services to meet requirements.

In general, you should stop collecting information when you have enough data to make informed decisions about the acquisition strategy. Commercial markets are dynamic, complex, and competitive. It is not reasonable to expect that you will learn everything about a market. Companies are interested in furthering their sales opportunities and will usually cooperate with your information request, but they may not reveal everything due to competitive reasons. Some individuals are comfortable making decisions based on limited information, which poses a risk of making the wrong decision based on insufficient research. Others put off making decisions while they await more data, which poses a risk of unnecessarily delaying the acquisition. At some point, you will reach diminishing returns during your market research. Sharing your results with team members can help keep the market research effort on track and reasonable.

Procurement Integrity Act

During your discussions with potential sources, you should be aware of certain restrictions on what you may discuss.

The Procurement Integrity Act (41 U.S.C. 423) prohibits personnel "participating personally and substantially" in a Federal agency procurement from

- soliciting or accepting jobs or business opportunities from competing contractors,
- asking for or receiving things of value (\$20 or more) from competing contractors,
- disclosing bidder proposal information to competing contractors, and
- disclosing to competing contractors any source selection information that has not already been made public.

Source selection information includes bid prices in response to an invitation for bids; proposed costs or prices in response to an RFP; source selection plans; technical evaluation plans; proposal evaluations; competitive range determinations; rankings of bids, proposals, or competitors; and source selection panel reports.

Personnel who are "participating personally and substantially" in Federal agency procurement

- prepare or review specifications,
- evaluate bids or proposals,
- select sources,
- conduct negotiations, and
- review and approve contract awards, modifications, or extensions.

Discussions between industry representatives and acquisition personnel that do not lead to the above prohibited activities are not just allowed, they are encouraged when the purpose is to gain a better understanding of the commercial market, including appropriate selection criteria. If you are a participant in a procurement action, remember to adhere to the procurement integrity requirements when conducting market research. Refer to FAR 3.104 for additional details on procurement integrity.

Paperwork Reduction Act

The Paperwork Reduction Act (44 U.S.C. 3501) is designed to reduce information collection and paperwork burdens on the general public, including businesses. The act defines "collection of information" as obtaining, causing to be obtained, soliciting, or requiring the disclosure to third parties, or the public, of facts or opinions by or for an agency, regardless of form or format, calling for answers to identical questions posed to, or identical reporting or recordkeeping requirements imposed on, 10 or more people, other than agencies, instrumentalities, or employees of the United States.

If you plan to send a structured survey to, or conduct phone interviews using an identical set of questions with, 10 or more individuals (including businesses), you may be subject to the Paperwork Reduction Act. If so, you need to obtain a clearance with the Office of Management and Budget before proceeding with your survey.

The Paperwork Reduction Act requirements do not apply to unstructured sessions (such as at a conference) when questions are asked of the public or when requests are specifically tailored to an individual or business.

To avoid the Paperwork Reduction Act requirements, you should restrict structured surveys to nine or fewer respondents.

Cost of Market Research

The costs of conducting market research range from minimal (using web searches) to substantial (buying and testing product samples, visiting sites). Some costs may be absorbed through investments in continuing education (attending industry or trade conferences), attendance at professional organization meetings, trade publication subscriptions, and so on. Other costs, such as visiting commercial establishments or obtaining and testing product samples, may seem harder to justify, especially when budgets are tight. However, conducting sound market research is considerably less costly than building prototypes, running extensive tests during a full-scale development, or buying products or services that do not fully meet user needs.

Market research requires some up-front investment in time and cost, but it can pay substantial dividends as the acquisition process unfolds from requirements development through delivery and support. For services, too, the cost of a poor decision can be substantial. Inadequate service delivery may affect mission support, result in inefficient operations, or require the time and cost to replace the service provider. By investing in market research early in the acquisition process, the likelihood of these problems occurring is greatly reduced.
Other Information on Market Research

Many tutorials and guides on market research are available on the Internet. They include the following:

- Defense Acquisition University, Continuous Learning Module CLC004, "Market Research," https://learn.dau.mil/html/clc/Clc.jsp.
- Information Research Services, "Condensed Guide to Market Research," http://www.informars.com/mt/guides/guide.htm.
- Navy Acquisition Reform Office, "Market Research Tutorial," http://acquisition.navy.mil/aosfiles/tools/marketresearch/index.html.
- National Aeronautics and Space Administration, "Market Research Guide," http://www.hq.nasa.gov/office/procurement/market.html.
- Office of the Secretary of Defense for Acquisition, Technology and Logistics (Acquisition Initiatives), "Commercial Item Handbook," http://www.acq.osd.mil/dpap/Docs/cihandbooks.pdf.
- Rutgers University Libraries, "Market Research," http://www.libraries.rutgers.edu/rul/rr_gateway/research_guides/busi/markres.shtml.
- Defense Standardization Program Office, "Commercial Item Handbook," http://assist.daps.dla.mil/quicksearch/basic_profile.cfm?ident_number=112025.
- Army Contracting Agency, "Market Research Guide," http://www.aca.army.mil/docs/Community/aca_mktrsch_gd.doc.
- Air Force Logistics Management Agency, "Market Research/Analysis Guide," https://akss.dau.mil/Documents/Policy/AFLMAMarketResearchAnalysisGuide.pdf.
- Air Force Materiel Command, "Market Research Process Guide," https://www.afmc-mil.wpafb.af.mil/HQ-AFMC/PK/pkp/polvault/guides/ market_research_guide.doc.
- Air Force Materiel Command, "Market Research Product/Service Template," https://www.afmc-mil.wpafb.af.mil/HQ-AFMC/PK/pkp/polvault/guides/ market_research_template.doc.

Appendix A. Types of Information Available on the Internet

This appendix identifies some of the types of information available on the Internet. Some types are useful for strategic market research, some for tactical market research, and some for both.

Product and Service Information

The following are examples of product and service information available on the Internet:

- Available products and services, and the companies that provide them
- Part manufacturers
- Salient characteristics (shape, size, performance specifications)
- Part identification (such as the national stock number)
- Parts that meet government specifications
- Ordering information
- Procurement histories with unit prices.

Product or service catalogs—or databases—from commercial suppliers are a valuable source of information. Government parts databases, although limited to items that the government has already bought, are helpful in locating items that fall within the broad definition of nondevelopmental items—items that are available in the market and do not require additional development. Cross-referencing within product databases enables you to search for a specific part by using any known piece of information about that part. Some product databases provide the ability to cross-reference between commercial parts and similar government parts. You can also search for products or services that meet a particular set of characteristics.

Another method of locating a particular product or service is to query a Usenet site, such as those available from Usenet.com. These sites are used by individuals with similar interests that may be oriented around a particular product or service (e.g., computers). A Usenet site is similar to a public bulletin board. You can read information, post information and questions, and respond to information and questions. You should validate information received from this type of site.

Supplier Lists

Supplier lists can be general—surveying a wide field—or specific to a particular category. If a specific list does not give you the data you need, try e-mailing or calling the parent company to inquire about related lists.

Industry Information

Internet market research can help you identify market capabilities and customary practices of a particular industry, such as the following:

- Industry-standard terminology
- Product modifications and tailoring
- Distribution and support options
- Representative incentive provisions
- Warranties
- Product obsolescence
- Spares provisions
- Pricing practices
- Methods for ensuring reliability
- Other capabilities of the marketplace.

News and Publications

Almost any recent, publicly available information is likely to be accessible through the Internet. The types of publications that are available through the Internet include newspapers, trade journals, government publications, announcements of new products, press releases, and annual reports released by individual companies. Internet search engines—such as A9, AltaVista, AlltheWeb, Ask, Dogpile, Gigablast, Google, HotBot, Lycos, MetaCrawler, MSN, SearchHippo, WiseNut, and Yahoo (to name a just few)—enable you to locate articles by using keywords, product names, services, or the name of a particular company. Search Engine Guide (searchengineguide.com) offers lengthy lists of hyperlinks to various types of search engines.

Many electronic publications contain either the full text or an abstract of published material and include bibliographic references. Some electronic publications cover a broad range of business and economic information across all segments of the economy. These publications can be helpful in assessing the health of particular industries or even past performance of specific companies. Others specialize in one kind of information, such as announcements of new products or services.

Government Contract Data

For contract actions over \$3,000, the Federal Procurement Data System–Next Generation (FPDS-NG) has data on government-wide contract information databases. The FPDS-NG includes the following information:

- Contractor names, addresses, and DUNS codes
- Identification of the awarding agency and office
- Federal supply codes and names for the products and services purchased
- Locations of contract performance
- Identification of small or minority owned business awardees
- Contract types, dollar values, and dates
- Competition information.

The FPDS-NG allows searches on the basis of any data field or item of information. Although most of the FPDS-NG data come from the government, commercial suppliers of contract information databases usually add information or cross-references that expand the use of the FPDS-NG data.

Federal Business Opportunities (FedBizOpps) is the single government point of entry for Federal Government procurement opportunities over \$25,000. In addition to being the portal through which government agencies publicize their business opportunities, FedBizOpps is useful for historical information. A search of archived documents yields solicitation and award information, contracting agency points of contact, and supplier contact information.

Past performance information also is available on the Internet. The Past Performance Information Retrieval System (www.ppirs.gov) is a web-enabled, government-wide application that provides timely and pertinent information about the past performance of contractors. The Federal acquisition community can use this information when making source selection decisions.

Appendix B. Web-Based Information Sources

This appendix lists some of the many sources of market research information available through the Internet. They are arranged alphabetically by category. Each entry includes, where available, the website name, Internet address, postal address, phone number, and e-mail address for a point of contact.

We do not endorse any of these websites or their products or services; we list them here only as examples of the types of websites that might help narrow the scope of your market investigations.

Remember that the Internet changes constantly. Websites are updated regularly, Internet addresses change, and new websites are launched frequently. At the same time, older websites combine with other sources, or—as products and services change—are removed. We encourage you to explore Internet resources and find those that will best meet your needs.

Acquisition and Contracting

Acquisition Central http://www.acquisition.gov/ Contact form: http://www.acquisition.gov/ contact_us.cfm

Consolidated Contracting Initiative http://procurement.nasa.gov/ cgi-bin/cci/first.cgi Contact form: http://procurement. nasa.gov/cgi-bin/feedback/ feedback.cgi?application_id=23

D&B Government Services http://www.dnb.com/us/dnbgov/ index.html 103 JFK Parkway Short Hills, NJ 07078 800-519-3111 Customer service: custserv@dnb.com Government affairs: slobodiend@dnb.com

Department of Defense eMall http://www.emall.dla.mil 877-352-2255 dod-emallsupport@dlis.dla.mil

Eagle Eye Publishers, Inc. 10560 Main Street, PH18 Fairfax, VA 22030-7115 703-359-8980 http://www.eagleeyeinc.com/

FedBizOpps www.fedbizopps.gov

Federal Procurement Data System– Next Generation https://www.fpds.gov/

FedSpending.org http://fedspending.org/

Federal Supply Schedules http://www.fss.gsa.gov

General Services Administration Advantage https://www.gsaadvantage.gov 877-472-3777

GSA Government-Wide Acquisition Contracts http://www.gsa.gov/Portal/gsa/ep/ contentView.do?P=FG1& contentId=16146&contentType= GSA_OVERVIEW

National Customer Service Center 800-488-3111 NCSCcustomer.service@gsa.gov

INPUT 10790 Parkridge Boulevard Suite 200 Reston, VA 20191 888-99-INPUT http://www.input.com/

Institute for Supply Management http://www.ism.ws/ PO Box 22160 Tempe, AZ 85285-2160 800-888-6276 Contact list: http://www.ism.ws/ contact/index.cfm

ITEC Direct http://www.itec-direct.navy.mil/

Javits-Wagner-O'Day http://www.jwod.com/ 877-GET-JWOD customercare@jwod.com

Market Research.com http://www.marketresearch.com/ 11200 Rockville Pike, Suite 504 Rockville, MD 20852 800-298-5699 customerservice@ marketresearch.com

National Contract Management Association http://www.ncmahq.org/ 8260 Greensboro Drive, Suite 200 McLean,VA 22102 800-344-8096 memberservices@ncmahq.org

Past Performance Information Retrieval System http://www.ppirs.gov/ 603-431-9460, ext. 486 webptsmh@navy.mil

Adhesives and Sealants

Adhesives and Sealants.com http://www.adhesivesandsealants. com

Adhesive and Sealant Council http://www.ascouncil.org/ 7979 Old Georgetown Road Suite 500 Bethesda, MD 20814 301-986-9700 info@ascouncil.org

ThomasNet http://thomas.loc.gov/ 5 Penn Plaza New York, NY 10001 800-699-9822 Registration form: http://www. thomasnet.com/mythomas/ signup.html?navsec=header

Aerospace

Aerospace Industries Association http://www.aia-aerospace.org/ 1000 Wilson Boulevard Suite 1700 Arlington, VA 22209–3928 703–358–1000 Contact list: http://www. aia-aerospace.org/contact.cfm

Forecast International http://www.forecastinternational. com/ 22/25 Commerce Road Newtown, CT 06470 203-426-0800 Sales/customer service/marketing: sales@forecast1.com

IHS

http://www.ihs.com/ 15 Inverness Way East Englewood, CO 80112 800-525-7052 Sales information request page: http://solutions.ihs.com/ products/standards/webquote/ quoteprocurement.htm

Jane's Information Group http://www.janes.com/ 110 N. Royal Street, Suite 200 Alexandria,VA 22314 800-824 0768 Customer service: customer services.us@janes.com

PartsBase http://partsbase.com/ Contact list: http://partsbase.com/contactus.asp

Apparel/Fiber/Textiles

American Apparel and Footwear Association http://www.apparelandfootwear. org/ 1601 N. Kent Street, Suite 1200 Arlington, VA 22209 800-520-2262 Contact list: http://www.apparelandfootwear. org/AboutAAFA/Staff.asp

Apparel Search http://www.apparelsearch.com/

Garment Industry Development Corp. http://www.gidc.org/enter.html 275 7th Avenue, 15th Floor New York, NY 10001 212-366-6160 info@gidc.org

International Textile and Apparel Association http://www.itaaonline.org/ 6060 Sunrise Vista Dr., Suite 1300 Citrus Heights, CA 95610 916-723-1628 info@itaaonline.org National Textile Association http://www.nationaltextile.org/ 6 Beacon Street, Suite 1125 Boston, MA 02108 617-542-8220

Sourcing Mall http://www.sourcingmall.com/ 211 Gregson Drive Cary, NC 27511 919-380-2156 jlovejo@tc2.com

Architect and Engineering

The American Institute of Architects http://www.aia.org/ 1735 New York Ave. NW Washington, DC 20006-5292 202-626-7300 infocentral@aia.org

The Association of Licensed Architects http://www.licensedarchitect.org/ PO Box 687 Barrington, IL 60011-0687 847-382-0630 ala@licensedarchitect.org

Automotive

Automotive Industry Action Group http://www.aiag.org/Index.cfm 26200 Lahser Rd., Suite 200 Southfield, MI 48033-7100 248-358-3003 info@aiag.org

IHS

http://www.ihs.com/ 15 Inverness Way East Englewood, CO 80112 800-525-7052 Sales information request page: http://solutions.ihs.com/ products/standards/webquote/ quoteprocurement.htm

Wards Auto http://wardsauto.com/ 248-799-2642 wards@wardsauto.com

Aviation

Airliners.Net http://www.airliners.net/ Contact form: http://www.airliners.net/ comments/

GlobalAir.com http://www.globalair.com/ Global Aviation Navigator, Inc. PO Box 20865 Louisville, KY 40250-0865

http://www sociation 6060 Sunr ace.org/ Citrus Hei 916, 723, 1 888-236-4309 webmaster@globalair.com

ILSmart http://www.ilsmart.com/ 901-794-5000 Contact form: http://www.ilsmart.com/ contact.asp

Internet Parts Locator Systems http://www.ipls.com/ 954-401-5614

PartsBase http://partsbase.com/ Contact list: http://partsbase.com/contactus.asp

Spec2000 http://www.spec2000.com/ Air Transport Association of America 1301 Pennsylvania Ave. NW Suite 1100 Washington, DC 20004–1707 800–375–9286 Spec2000@airlines.org

Cataloging

Electronic Commerce Code Management Association http://www.eccma.org/new/ 2980 Linden St., Ste E2 Bethlehem, PA 18017 610-861-5990 info@eccma.org

FedLog http://www.dlis.dla.mil/Fedlog/ 877-352-2255 DLIS-Support@dla.mil

Chemical

ChemConnect http://www.chemconnect.com 2900 North Loop West, Suite 1210 Houston, TX 77092 713-470-2450

ChemIndustry.com http://www.chemindustry.com/ 730 E. Cypress Ave. Monrovia, CA 91016 626-930-0808 info@chemindustry.com

ICIS http://www.icis.com 888-525-3255 csc@icis.com

Purchasing.com http://www.purchasing.com/ Contact list: http://www.purchasing.com/info/ 28825.html?view=detail ThomasNet http://thomas.loc.gov/ 5 Penn Plaza New York, NY 10001 800-699-9822 Registration form: http://www. thomasnet.com/mythomas/signup. html?navsec=header

Construction

Associated Builders and Contractors http://www.abc.org/ 4250 N. Fairfax Drive, 9th Floor Arlington, VA 22203-1607 703-812-2000 gotquestions@abc.org

IHS

http://www.ihs.com/ 15 Inverness Way East Englewood, CO 80112 800-525-7052 Sales information request page: http://solutions.ihs.com/ products/standards/webquote/ quoteprocurement.htm

Sweets Network http://www.sweets.construction. com/ Contact form: http://www. construction.com/ContactUs/ ContactUs.asp?rd=http://products. construction.com/portal/server.pt

Data Management

Association for Configuration and Data Management http://www.acdm.org/ PO Box 58888 Salt Lake City, Utah 84158-0888 Contact link: http://www.acdm.org/feedback.php

Data Management Association http://www.dama.org PO Box 5786 Bellevue, WA 98006-5786 425-562-2636 Contact list: http://www.dama.org/public/ pages/index.cfm?pageid=118

D&B Government Services http://www.dnb.com/us/dnbgov/ index.html 103 JFK Parkway Short Hills, NJ 07078 800-519-3111 Customer service: custserv@dnb.com Government affairs: slobodiend@dnb.com

Defense

D&B Government Services http://www.dnb.com/us/ dnbgov/index.html 103 JFK Parkway Short Hills, NJ 07078 800-519-3111 Customer service: custserv@dnb.com Government affairs: slobodiend@dnb.com

Forecast International http://www.forecastinternational. com/ 22/25 Commerce Rd. Newtown, CT 06470 203-426-0800 Sales/customer service/marketing: sales@forecast1.com

IHS http://www.ihs.com/ 15 Inverness Way East Englewood, CO 80112 800-525-7052 Sales information request page: http://solutions.ihs.com/ products/standards/webquote/ quoteprocurement.htm

Jane's Information Group http://www.janes.com/ 110 N. Royal Street, Suite 200 Alexandria,VA 22314 800-824 0768 Customer service: customer services.us@janes.com

PartsBase http://partsbase.com/ Contact list: http://partsbase.com/contactus.asp

Education and Training

Career OneStop http://www.careeronestop.org Contact list: http://www.careeronestop.org/ usersupport/contact.asp

Human Performance Center SPIDER https://www.spider.hpc.navy.mil/

International Association for Continuing Education and Training http://www.iacet.org/ 8405 Greensboro Drive, Suite 800 McLean,VA 22102 703-506-3275 Contact list: http://www.iacet.org/ contactus/staffmembers.htm

Electronics

CommerceNet http://cit.stanford.edu/ commercenet.html

Electronic Industries Alliance http://www.eia.org/ 2500 Wilson Blvd. Arlington,VA 22201 703-907-7500

International Electrotechnical Commission http://www.iec.ch/ Contact list: http://www.iec.ch/helpline/ contactus/contactus_entry.htm

IHS

http://www.ihs.com/ 15 Inverness Way East Englewood, CO 80112 800-525-7052 Sales information request page: http://solutions.ihs.com/ products/standards/webquote/ quoteprocurement.htm

Price Watch http://www.pricewatch.com/

Purchasing.com http://www.purchasing.com/ Contact list: http://www.purchasing.com/ info/28825.html?view=detail

ThomasNet http://thomas.loc.gov/ 5 Penn Plaza New York, NY 10001 800-699-9822 Registration form: http://www. thomasnet.com/mythomas/ signup.html?navsec=header

Energy

EnergyBulletin http://www.energybulletin.net/ Contact form: http://www.energybulletin.net/ emailform.php?email=editors

Energy Information Administration http://www.eia.doe.gov/ 1000 Independence Ave. SW Washington, DC 20585 202-586-8800 InfoCtr@eia.doe.gov

Energy Star http://www.energystar.gov/

IHS http://www.ihs.com/ 15 Inverness Way East Englewood, CO 80112 800-525-7052 Information request page: http://solutions.ihs.com/ products/standards/webquote/ quoteprocurement.htm

United States Energy Association http://www.usea.org/ 1300 Pennsylvania Ave., NW Washington, DC 20004 202-312-1230 Contact link: http://www.usea.org/contactus.asp

World Energy Council http://www.worldenergy.org/ wec-geis/default.asp 5th Floor Regency House, 1–4 Warwick Street London W1B 5LT, UK +44 20 7734 5996 info@worldenergy.org

Engineering

American Society of Mechanical Engineers www.asme.org

Engineering.com http://www.engineering.com/ 40 Village Centre Place Mississauga, Ontario, Canada L4Z 1V9 877-997-9917 info@engineering.com

Engineering Information http://www.ei.org/ 360 Park Avenue South New York, NY 10010 800-221-1044 eicustomersupport@elsevier.com

ILI Infodisk, Inc. http://www.ili-info.com/ 610 Winters Ave. Paramus, NJ 07652 201-986-1131 Sales: sales@ili-info.com

Mechanical Engineering Magazine Online http://www.memagazine.org/ Three Park Avenue New York, NY 10016-5990 800-48-ALGOR memag@asme.org

Military Engineering Data Asset Locator System https://www.dlis.dla.mil/medals/ 877-352-2255 DLIS-Support@dla.mil

TechExpo http://www.techexpo.com/ techexpo@techexpo.com

ThomasNet http://thomas.loc.gov/ 5 Penn Plaza New York, NY 10001 800-699-9822 Registration form: http://www. thomasnet.com/mythomas/ signup.html?navsec=header

Facilities Operation and Maintenance

Facilities Maintenance and Operations Committee http://www.nibs.org/fmoc.html 1090 Vermont Avenue, NW Suite 700 Washington, DC 20005-4905 202-289-7800 nibs@nibs.org

Federal Facilities Council http://www7.nationalacademies. org/ffc/ National Academy of Sciences 500 Fifth Street, NW Washington, DC 20001 Listserv subscription: http://www8.nationalacademies. org/mail_list/default.asp?list_id= 361&action=subscribe

International Facility Management Association http://www.ifma.org/index.cfm 1 E. Greenway Plaza, Suite 1100 Houston, TX 77046-0194 713-623-4362 webmaster@ifma.org

Finance and Economics

Consumer Price Index http://www.bls.gov/cpi/ 202-691-7000 cpi_info@bls.gov

Council on Competitiveness http://www.compete.org 1500 K Street NW, Suite 850 Washington, DC 20005 202-682-4292

D&B Government Services http://www.dnb.com/us/dnbgov/ index.html 103 JFK Parkway Short Hills, NJ 07078 800-519-3111 Customer service: custserv@dnb.com Government affairs: slobodiend@dnb.com

Dialog http://www.dialog.com/ 11000 Regency Parkway Suite 10 Cary, NC 27518 800-3-DIALOG Information form: http://www.dialog.com/contacts/ forms/member.shtml

Eagle Eye http://www.eagleeyeinc.com/ 10560 Main Street, PH-10 Fairfax,VA 22030-7182 703-359-8980 info@eagleeyeinc.com

Input http://www.input.com/corp/ agencies/federal.cfm 888-99-INPUT Contact form: http://www.input. com/corp/forms/form.cfm? promoid=807&sourceid=12

Investor's Business Daily http://www.investors.com/ 800-831-2525 Contact list: http://www.investors.com/ contact/

LexisNexis http://www.lexisnexis.com/ 1150 18th Street, NW Suite 275 Washington, DC 20036 800-253-4183 Government solutions:

advgovtsolutions@lexisnexis.com Producer Price Index http://www.bls.gov/ppi/

202-691-7705 ppi-info@bls.gov STAT-USA

http://www.stat-usa.gov/ 800-STAT-USA statmail@esa.doc.gov

Sterling Commerce http://www.sterlingcommerce.com 800-299-4031 inquiry@stercomm.com

Wall Street Journal http://online.wsj.com/public/us 800-369-2834 onlinejournal@wsj.com

Foreign Military Sales

FedLog http://www.dlis.dla.mil/Fedlog/ 877-352-2255 DLIS-Support@dla.mil

Hardware

ThomasNet http://thomas.loc.gov/ 5 Penn Plaza New York, NY 10001 800-699-9822 Registration form: http://www. thomasnet.com/mythomas/ signup.html?navsec=header

Health Care

ECRI http://www.ecri.org/

5200 Butler Pike Plymouth Meeting, PA 19462 610-825-6000 info@ecri.org

LexisNexis http://www.lexisnexis.com/ 1150 18th Street, NW, Suite 275 Washington, DC 20036 800-253-4183 Government solutions: advgovtsolutions@lexisnexis.com

Sterling Commerce http://www.sterlingcommerce.com 800-299-4031 inquiry@stercomm.com

TechExpo http://www.techexpo.com/ techexpo@techexpo.com

Industrial

Sterling Commerce http://www.sterlingcommerce.com 800-299-4031 inquiry@stercomm.com

ThomasNet http://thomas.loc.gov/ 5 Penn Plaza New York, NY 10001 800-699-9822 Registration form: http://www. thomasnet.com/mythomas/ signup.html?navsec=header

Information Technology

CommerceNet http://cit.stanford.edu/ commercenet.html

Electronic Industries Alliance http://www.eia.org/ 2500 Wilson Blvd. Arlington,VA 22201 703–907-7500

FCW http://www.fcw.com/

Government Computer News http://www.gcn.com/

Information Technology Services Marketing Association http://www.itsma.com/ Lexington Office Park 420 Bedford Street, Suite 110 Lexington, MA 02420 781-862-8500 info@itsma.com

Input http://www.input.com/corp/ agencies/federal.cfm 888-99-INPUT Contact form: http://www.input. com/corp/forms/form.cfm? promoid=807&sourceid=12

ITEC Direct http://www.itec-direct.navy.mil/

Price Watch http://www.pricewatch.com/

Wall Street Journal http://online.wsj.com/public/us 800-369-2834 onlinejournal@wsj.com

Washington Technology http://www.washingtontechnology. com/

Instruments and Controls

ThomasNet http://thomas.loc.gov/ 5 Penn Plaza New York, NY 10001 800-699-9822 Registration form: http://www. thomasnet.com/mythomas/ signup.html?navsec=header

Interchangeability and Substitutability

FedLog http://www.dlis.dla.mil/Fedlog/ 877-352-2255 DLIS-Support@dla.mil

International Markets

Forecast International http://www.forecastinternational. com/ 22/25 Commerce Rd. Newtown, CT 06470 203-426-0800 Sales/customer service/marketing: sales@forecast1.com

Law Enforcement

D&B Government Services http://www.dnb.com/us/ dnbgov/index.html 103 JFK Parkway Short Hills, NJ 07078 800-519-3111 Customer service: custserv@dnb.com Government affairs: slobodiend@dnb.com Jane's Information Group http://www.janes.com/ 110 N. Royal Street, Suite 200 Alexandria, VA 22314 800-824 0768 Customer service: customer services.us@janes.com

LexisNexis http://www.lexisnexis.com/ 1150 18th Street NW, Suite 275 Washington, DC 20036 800-253-4183 Government solutions: advgovtsolutions@lexisnexis.com

Lease or Rental of Equipment

All Options Equipment Leasing http://equipment.alloptions.com Leads2Results, Inc. 2101 NW Corporate Blvd Suite 208 Boca Raton, FL 33431 866-677-4580 info@alloptions.com

Equipment Leasing and Finance Association http://www.elaonline.org/ Contact list: http://www. elaonline.org/aboutelfa/contact.cfm

Equipment Leasing and Finance Foundation http://www.leasefoundation.org/ 4301 N. Fairfax Drive, Suite 550 Arlington VA 22203-1627 703-527-8655 llevine@elamail.com

National Association of Equipment Leasing Brokers http://www.naelb.org/ 304 W. Liberty Street, Suite 201 Louisville, KY 40202 800-996-2352 info@naelb.org

Legal

American Bar Association http://www.abanet.org/ 321 N. Clark St. Chicago, IL 60610 800-285-2221 Contact form: http://www. abanet.org/feedback.shtml

Dialog http://www.dialog.com/ 11000 Regency Parkway, Suite 10 Cary, NC 27518 800-3-DIALOG Information form: http://www.dialog.com/ contacts/forms/member.shtml ILI Infodisk, Inc. http://www.ili-info.com/ 610 Winters Ave. Paramus, NJ 07652 201-986-1131 Sales: sales@ili-info.com

LexisNexis http://www.lexisnexis.com/ 1150 18th Street NW, Suite 275 Washington, DC 20036 800-253-4183 Government solutions: advgovtsolutions@lexisnexis.com

WestLaw http://www.westlaw.com 800-937-8529 west.support@thomson.com

Logistics

American Logistics Association http://www.ala-national.org/ 1133 Fifteenth Street, Suite 640 Washington, DC 20005 202-466-2520 Contact form: http://www. ala-national.org/contact/

FedLog http://www.dlis.dla.mil/Fedlog/ 877-352-2255 DLIS-Support@dla.mil

Purchasing.com http://www.purchasing.com/ Contact list: http://www.purchasing.com/ info/28825.html?view=detail

Sterling Commerce http://www.sterlingcommerce.com 800-299-4031 inquiry@stercomm.com

Machinery

American Society of Mechanical Engineers www.asme.org

National Tooling and Machining Association https://www.ntma.org/eweb/ StartPage.aspx 9300 Livingston Road Fort Washington, MD 20744 800-248-6862

ThomasNet http://thomas.loc.gov/ 5 Penn Plaza New York, NY 10001 800-699-9822 Registration form: http://www. thomasnet.com/mythomas/ signup.html?navsec=header

Maintenance, Repair, and Alteration of Real Property

Associated Builders and Contractors http://www.abc.org/ 4250 N. Fairfax Drive, 9th Floor Arlington, VA 22203-1607 703-812-2000 gotquestions@abc.org

National Association of the Remodeling Industry http://www.nari.org/ 780 Lee St, Suite 200 Des Plaines, IL 60016 800-611-NARI (6274) info@nari.org

Manufacturing and Fabrication

Manufacturing.net http://www.manufacturing.net/ comments@manufacturing.net

Society of Manufacturing Engineers http://www.sme.org

ThomasNet http://thomas.loc.gov/ 5 Penn Plaza New York, NY 10001 800-699-9822 Registration form: http://www. thomasnet.com/mythomas/ signup.html?navsec=header

Marine

Forecast International http://www.forecastinternational. com/ 22/25 Commerce Rd. Newtown, CT 06470 203-426-0800 Sales/customer service/marketing: sales@forecast1.com

ILSmart http://www.ilsmart.com/ 901-794-5000 Contact form: http://www. ilsmart.com/contact.asp

National Marine Electronics Association http://www.nmea.org/ 7 Riggs Ave. Severna Park, MD 21146 410-975-9425 info@nmea.org

National Marine Manufacturers Association http://www.nmma.org/ 200 E. Randolph Dr., Suite 5100 Chicago, IL 60601 312-946-6200 Contact list: http://www. nmma.org/corporate/contact/

Medical

American Medical Association http://www.ama-assn.org/ 515 N. State Street Chicago, IL 60610 800-621-8335 Contact form: http://webapps. ama-assn.org/contactus/ contactusMain.do;jsessionid=C6E7 A774C394AD36FAB15CBBD6A2 C523

SAMMS Procurement by Electronic Data Exchange https://dmmonline.dscp.dla.mil/ pharm/spede.asp

World Medical Association http://www.wma.net/e/ 13, ch. du Levant CIB, Bâtiment A 01210 Ferney-Voltaire, France +33 4 50 40 75 75 wma@wma.net

Metals and Materials

ASM International: The Materials Information Society http://www.asminternational.org/ 9639 Kinsman Road Materials Park, OH 4073-0002 800-336-5152 CustomerService@ asminternational.org

ILI Infodisk, Inc. http://www.ili-info.com/ 610 Winters Ave. Paramus, NJ 07652 201-986-1131 Sales: sales@ili-info.com

Purchasing.com http://www.purchasing.com/ Contact list: http://www.purchasing.com/ info/28825.html?view=detail

ThomasNet http://thomas.loc.gov/ 5 Penn Plaza New York, NY 10001 800-699-9822 Registration form: http://www. thomasnet.com/mythomas/ signup.html?navsec=header

TMS Online http://www.tms.org/TMSHome. html 184 Thorn Hill Road Warrendale, PA 15086-7514 800-759-4867 Contact list: http://members.tms.org/Staff.asp

News

bizjournals http://www.bizjournals.com/

Business Week http://www.businessweek.com/

Federal Computer Week http://www.fcw.com/

Forbes http://www.forbes.com/

Government Computer News http://www.gcn.com/

The National Academies http://www.nationalacademies.org/ 500 Fifth Street NW Washington, DC 20001 Contact link: http://www.nationalacademies.org/ cgi-bin/formfeed.cgi

Purchasing.com http://www.purchasing.com/ Contact list: http://www.purchasing.com/ info/28825.html?view=detail

Wall Street Journal http://online.wsj.com/public/us 800-369-2834 onlinejournal@wsj.com

Washington Technology http://www. washingtontechnology.com/

Office Equipment

Better Buys for Business http://www.betterbuys.com/ 800-247-2185 info@betterbuys.com

Other Government Resources

Business.gov www.business.gov Contact link: http://www.business. gov/appmanager/bg/main/ bg_page_contactUs_ftr

Grants.gov http://www.grants.gov/ 800-518-4726 support@grants.gov

Patent Electronic Business Center http://www.uspto.gov/ebc/ index.html 800-786-9199 ebc@uspto.gov

USA.gov http://www.usa.gov/ Office of Citizen Services and Communications, GSA 1800 F Street, NW Washington, DC 20405 800-333-4636 Contact link: http://answers. usa.gov/cgi-bin/gsa_ict.cfg/php/ enduser/ask.php

Parts Management

ASSIST Database for Military Specifications and Military Standards http://assist.daps.dla.mil/ online/start/ Document Automation and Production Service Building 4/D, 700 Robbins Avenue Philadelphia, PA 19111-5094 Contact list: http://assist.daps.dla.mil/feedback/

Government-Industry Data Exchange Program http://www.gidep.org/ 951-898-3207 gidep@gidep.org

Federal Logistics Information System https://www.webflis.dlis.dla.mil/ WEBFLIS/ 269-961-4698 or -4627 webflis@dlis.dla.mil

PartsBase http://partsbase.com/ Contact list: http://partsbase.com/contactus.asp

PartSolutions http://www.part-solutions.com/ index_main.asp 513-453-0453

Plastics and Rubber

Polysort http://www.polysort.com/ 4000 Embassy Parkway, Suite 400 Akron, OH 44333 800-326-8666 Contact form: http://www.polysort. com/helpform.aspx

ThomasNet http://thomas.loc.gov/ 5 Penn Plaza New York, NY 10001 800-699-9822 Registration form: http://www. thomasnet.com/mythomas/ signup.html?navsec=header

Power Systems

Forecast International http://www.forecastinternational. com/ 22/25 Commerce Rd. Newtown, CT 06470 203-426-0800 Sales/customer service/marketing: sales@forecast1.com

Power Systems Engineering Research Center http://www.pserc.wisc.edu/ Arizona State University 577 Engineering Research Center, Box 878606 Tempe, AZ 85287-8606 480-965-1643 pserc@asu.edu

Professional, Administrative, and Management Support Services

Service and Support Professionals Association http://www.thesspa.com/ World Headquarters 11031 Via Frontera, Suite A San Diego, CA 92127 858-674-5491 info@thesspa.com

Property Management

All Property Management http://www. allpropertymanagement.com/ PO Box 943 Winthrop, WA 98862 sales@allpropertymanagement. com

National Property Management Association http://www.npma.org/ 28100 US Highway 19 North Suite 400 Clearwater, FL 33761 727-736-3788 hq@npma.org

Publishing

Association of American Publishers http://www.publishers.org/ 71 Fifth Avenue, 2nd Floor New York, NY 10003 212-255-0200

Bowker http://www.bowker.com/ 630 Central Ave. New Providence, NJ 07974 800-526-9537 Product sales: http://www. bowker.com/contact/sales.htm

Online Publishers Association http://www.online-publishers.org/ 249 West 17th Street New York, NY 10011 212-204-1488 info@online-publishers.org

Pumps, Valves, and Accessories

ThomasNet http://thomas.loc.gov/ 5 Penn Plaza New York, NY 10001 800-699-9822 Registration form: http://www. thomasnet.com/mythomas/ signup.html?navsec=header

Quality Control, Testing, and Inspection

American Society for Quality http://www.asq.org/ PO Box 3005 Milwaukee, WI 53201-3005 800-248-1946 help@asq.org

Research and Development

New Product Scout http://www.newproductscout.com/ 217 Ninth St. Pittsburgh, PA 15222 866-806-0476 info@newproductscout.com

R&D Magazine http://www.rdmag.com Contact form: http://www. rdmag.com/Feedback.aspx

Regulatory

Acquisition Central http://www.acquisition.gov/ Contact form: http://www. acquisition.gov/contact_us.cfm

D&B Government Services http://www.dnb.com/us/ dnbgov/index.html 103 JFK Parkway Short Hills, NJ 07078 800-519-3111 Customer service: custserv@dnb.com Government affairs: slobodiend@dnb.com

Office of Federal Contract Compliance Programs http://www.dol.gov/esa/ofccp/ index.htm U.S. Department of Labor Frances Perkins Building 200 Constitution Avenue NW Washington, DC 20210 866-4-USA-DOL Contact links: http://www.dol.gov/ esa/contacts/ofccp/contact_of.htm Thompson http://www.thompson.com/ public/ 800-677-3789

WestLaw http://www.westlaw.com 800-937-8529 west.support@thomson.com

Risk Management

D&B Government Services http://www.dnb.com/us/ dnbgov/index.html 103 JFK Parkway Short Hills, NJ 07078 800-519-3111 Customer service: custserv@dnb.com Government affairs: slobodiend@dnb.com

Factiva http://www.factiva.com/ business-information-service.html 800-369-0166 Sales request form: http://www. factiva.com/moreinfo/moreinfo. asp?node=menuElem1528&from= moreinfo_hp

Institute for Supply Management http://www.ism.ws/ PO Box 22160 Tempe, AZ 85285-2160 800-888-6276 Customer service form: http://www.ism.ws/contact/ CustomerService.cfm? navItemNumber=4914

Risk Management Association http://www.rmahq.org/RMA/ 800-677-7621 customers@rmahq.org

Salvage Services

American Salvage Association http://www.americansalvage.org/ 801 North Quincy Street Suite 200 Arlington,VA 22203 703-373-2267 rfredricks@vesselalliance.com

Salvage Industry http://www.salvageindustry.com/ 518 E. Industrial St. DeWitt, IA 52742 563-210-2668 info@salvageindustry.com

Science and Technology

AAAS http://www.aaas.org/ 1200 New York Avenue, NW Washington, DC 20005 202-326-6400 webmaster@aaas.org

Defense Technical Information Center http://www.dtic.mil/ 800-255-3842

Science and Technology Review http://www.llnl.gov/str/ 7000 East Avenue Livermore, CA 94550-9234 925-423-3432 str-mail@llnl.gov

SciTech Daily Review http://www.scitechdaily.com/ editor@scitechdaily.com

Security/Public Safety

Jane's Information Group http://www.janes.com/ 110 N. Royal Street, Suite 200 Alexandria,VA 22314 800-824 0768 Customer service: customer services.us@janes.com

Software

CommerceNet http://cit.stanford.edu/ commercenet.html

PtS Holdings http://www.pts.com/ Daresbury Point Green Wood Drive Manor Park Cheshire, WA7 1UP Phone: 01928 579700 holdings@pts.com

Software and Information Industry Association http://www.siia.net/ 1090 Vermont Ave NW Washington, DC 20005-4095 202-289-7442 Contact list: http://www.siia.net/contact/

Specifications and Standards

ASSIST Database for Military Specifications and Military Standards http://assist.daps.dla.mil/ online/start/ Document Automation and Production Service Building 4/D, 700 Robbins Avenue Philadelphia, PA 19111-5094 Contact list: http://assist.daps.dla.mil/feedback/ Defense Standardization Program Defense Logistics Agency, J-307 8725 John J Kingman Rd Stop 6233 Fort Belvoir, VA 22060-6221 http://www.dsp.dla.mil/

Document Center Inc. 111 Industrial Road Suite 9 Belmont, CA 94002 650-591-7600 http://www.document-center.com

ILI Infodisk, Inc. http://www.ili-info.com/ 610 Winters Ave. Paramus, NJ 07652 201-986-1131 Sales: sales@ili-info.com

IHS/Global 15 Inverness Way East Englewood, CO 80112 Research: 800-624-3974 ext. 1930 Sales: 877-413-5184 http://global.ihs.com

NSSN http://www.nssn.org Administered by American National Standards Institute http://www.ansi.org/ 1819 L Street, NW Washington, DC 20036 202-293-8020

Techstreet 3916 Ranchero Drive Ann Arbor, MI 48108 800-699-9277 techstreet.service@thomson.com

World Standards Service Network http://www.wssn.net

Supplier and Market Data

B2B Yellow Pages http://www.b2byellowpages.com/ PO Box 409 Syosset, NY 11791 718-937-7091 Contact list: http://www. b2byellowpages.com/contact.shtml

Best of the Web http://botw.org/ Contact form: http://botw.org/ helpcenter/contact.aspx

Big Yellow http://www.bigyellow.com/

BizWeb http://www.bizweb.com/

Business.com http://www.business.com/ 2120 Colorado Ave. Santa Monica, CA 90404 310-586-4111 http://www.business.com/ info/feedback.asp

Clickit http://www.clickit.com/ clickit/index.html 212-692-0704

Consumer Reports http://www.consumerreports.org/ cro/index.htm

Current Analysis http://www.currentanalysis.com 21335 Signal Hill Plaza, Suite 200 Sterling,VA 20164 877-787-8947 clientservices@ currentanalysis.com

Department of Commerce Bureau of Economic Analysis http://www.bea.gov/

Department of Defense eMall http://www.emall.dla.mil 877-352-2255 dod-emallsupport@dlis.dla.mil

Dialog

http://www.dialog.com/ 11000 Regency Parkway, Suite 10 Cary, NC 27518 800-3-DIALOG Information form: http://www.dialog.com/ contacts/forms/member.shtml

Eagle Eye http://www.eagleeyeinc.com/ 10560 Main Street, PH-10 Fairfax, VA 22030-7182 703-359-8980 info@eagleeyeinc.com

EDGAR http://www.sec.gov/edgar/ searchedgar/webusers.htm

Factiva http://www.factiva.com/ business-information-service.html 800-369-0166 Sales request form: http://www. factiva.com/moreinfo/moreinfo. asp?node=menuElem1528&from= moreinfo_hp

FedBizOpps www.fedbizopps.gov

First Research http://www.firstresearch.com/ 4321 Lassiter at North Hills Ave. Suite 200 Raleigh, NC 27609 866-788-9389 Contact form: http://www. firstresearch.com/contact.asp

Hoover's http://hoovers.com/free/ Contact form: http://hoovers.com/ business-information/pageid10122/ global-corp-index.xhtml

ILSmart http://www.ilsmart.com/ 901-794-5000 Contact form: http://www. ilsmart.com/contact.asp

Input

http://www.input.com/corp/ agencies/federal.cfm 888-99-INPUT Contact form: http://www. input.com/corp/forms/form.cfm? promoid=807&sourceid=12

Investor's Business Daily http://www.investors.com/ 800-831-2525 Contact list: http://www.investors. com/contact/

Jane's Information Group http://www.janes.com/ 110 N. Royal Street, Suite 200 Alexandria,VA 22314 800-824 0768 Customer service: customer services.us@janes.com

LexisNexis http://www.lexisnexis.com/ 1150 18th Street, NW, Suite 275 Washington, DC 20036 800-253-4183 Government solutions: advgovtsolutions@lexisnexis.com

Market Research.com http://www.marketresearch.com/ 11200 Rockville Pike, Suite 504 Rockville, MD 20852 800-298-5699 customerservice@ marketresearch.com

Past Performance Information Retrieval System http://www.ppirs.gov/ 603-431-9460, ext. 486 webptsmh@navy.mil

ReportSure http://www.reportsure.com/ 5310 NW 33rd Ave., Suite 118 Fort Lauderdale, FL 33309 866-903-4515 Contact list: http://www. reportsure.com/contact.aspx Research and Markets http://www.researchandmarkets. com/

Small Business Administration http://www.sba.gov/ 800-827-5722 answerdesk@sba.gov

Standard and Poors http://www.netadvantage. standardandpoors.com 800-523-4534

Sterling Commerce http://www.sterlingcommerce.com 800-299-4031 inquiry@stercomm.com

TechSavvy http://www.techsavvy.com/ 800-854-7179

U.S. Census Bureau http://www.census.gov/

Wall Street Journal http://online.wsj.com/public/us 800-369-2834 onlinejournal@wsj.com

World Business Website Directory http://www.wowyellowpages.com/ admin@wowyellowpages.com

Yellow Pages Local Directory http://www.yellowpages.com/ 800-343-7390 ypcsupport@yellowpages.com

Supply Management

Institute for Supply Management http://www.ism.ws/ P.O. Box 22160 Tempe, AZ 85285-2160 800-888-6276 Customer service form: http://www.ism.ws/ contact/CustomerService. cfm?navItemNumber=4914

Survey Management

FedLog http://www.dlis.dla.mil/Fedlog/ 877-352-2255 DLIS-Support@dla.mil

Telecommunications

International Electrotechnical Commission http://www.iec.ch/ Contact list: http://www.iec.ch/helpline/ contactus/contactus_entry.htm

Sterling Commerce http://www.sterlingcommerce.com 800-299-4031 inquiry@stercomm.com

Telecommunications Industry Association http://www.tiaonline.org/ 2500 Wilson Blvd, Suite 300 Arlington,VA 22201 703-907-7700 Contact form: http://www.tiaonline.org/business/ about/help/feedback.cfm

Telecommunications Industry News http://www.teleclick.ca/

Transportation, Travel, and Relocation

European Relocation Association http://www.eura-relocation.com/ +44(0)8700 726 727 enquiries@eura-relocation.com

Jane's Information Group http://www.janes.com/ 110 N. Royal Street, Suite 200 Alexandria,VA 22314 800-824 0768 Customer service: customer services.us@janes.com

National Business Travel Association http://www.nbta.org/ 110 North Royal Street, 4th Floor Alexandria,VA 22314 703-684-0836 info@nbta.org

Travel Industry Association of America http://www.tia.org/index.html 1100 New York Avenue, NW Suite 450 Washington, DC 20005-3934 202-408-8422 feedback@tia.org

Travel Business Roundtable http://www.tbr.org/ Contact list: http://www.tbr.org/contact.htm

Ventilation

Greenheck Computer Aided Product Selection Program http://www.greenheck.com/caps/ PO Box 410 Schofield, WI 54476 715-359-6171 Contact form: http://www. greenheck.com/contact/

Appendix C. Examples of Tactical Information

This appendix contains examples of the types of tactical information you may need to collect.

General Information

Requirements definition

Product data sheets

Availability of product samples

Purchase descriptions used by other government agencies or in commercial transactions, including commercial specifications standards and statements of work

Average time between model changes and practice of providing continued parts inventories, upgrades, or production for phased-out models

Maturity of equipment design and criteria for measuring degree of maturity

Plans for handling upgrades and obsolescence

Length of time the product has been produced or service provided

Product quality, reliability, and maintainability experience of similar users

List of products and supplier services satisfying identical or similar service requirements

Cost drivers in the manufacture and use of the product

Applicable regulatory and de facto standards

Services

How services are segmented or packaged commercially

How services are provided (locally or off-site)

Factors used to evaluate service providers

Performance incentives

Contract type, length, terms, and conditions

Ownership and supply of needed equipment and other related supplies

Qualifications of the people providing services

Past performance and quality of services provided

Supplier Capability

Product distribution channels

Business practices in sales and distribution from manufacturer to wholesaler, distributor, or retailer, to user

Production capacity to meet requirements as part of commercial sales and the appropriate time to buy

For some items, capability to meet surge requirements and mobilization demands

Packaging, handling, storage, and transportation practices

Market Acceptance Criteria

Annual sales

Anticipated future orders

Description of supplier's quality controls, including extent of statistical process controls

Warranty terms and practices, and annual returns under warranty

Need for any preproduction or production qualification testing and special quality assurance requirements

Product evaluation criteria (including life-cycle criteria, if applicable)

Supportability

Ability to support the item for the duration of the expected military use

Product quality, reliability, and maintainability experience of similar users

Repair parts availability and lead-times, documentation, pricing, and distribution systems

Customer service, installation, checkout, and user operation and maintenance instructions

Requirements and provisions for manpower and personnel

Competitive or sole-source repair and support base

Willingness to allow the government to acquire licensing and subscription services to enable

competition for maintenance

For nondevelopmental items, perceived criticality of interfacing with other subsystems, software, etc., for overall system integrity

Training and training support requirements

Requirements for, and availability of, tools, test and diagnostic equipment, computer support resources, calibration procedures, and operations and maintenance manuals

Commercial repair capabilities

Supplier calibration, repair, and overhaul practices and capabilities documentation

Supplier commitment to outyear support

Degree of technical data package availability

Stability of current configuration and technology

Any needed special arrangements for maintenance according to the government's conditions

Test Data

Hardware, software, and manpower interface issues, such as human factors and product safety as experienced by similar users

Manufacturer test results

Certification or test results from independent test organizations

References

List of those currently using the product or service

List of similar users currently using the product or service in the kinds of environments for which the researcher intends it to be used

Business Data

Distribution practices

Minimum order quantities

Typical contract terms and conditions

Financing practices



Warranty procedures

Potential conflicts of interest (for services)

Historical information

Dates of past acquisitions for the supplies or services

Prevailing market conditions at those times

Quantities solicited and acquired for past acquisitions

Number of sources solicited for past acquisitions

Names of specific sources solicited

Number and names of offerors for past acquisitions

Any significant differences between government requirements documents for prior contracts and those for the current requirements

Length of past delivery or performance period, in days, weeks, months, or years

Months during which the supplies were delivered or the services performed

Whether the contractor met the delivery targets

Free-on-board point

Need for premium transportation to ensure timely delivery

Costs of ownership associated with past acquisitions

Past acquisition methods employed

General terms of past contracts

Significant differences between terms of past contracts and those recommended for the current acquisition

Problems encountered during past contract performance

Pricing Factors

Prices paid for the supplies or service, and changes in the supply, service, or market since then

Historical differences between prices paid by the government and those paid by other buyers, and reasons for such

Whether additional suppliers are expected to enter the market

Relationship of the quantity the government intends to buy and the quantity that other entities buy

Whether the planned volume will justify a lower-than-market price as a result of the seller's increased economies of scale

Whether the planned volume will be so large as to drive the sellers to or beyond full capacity, resulting in unanticipated inflation

Whether the acquisition is for items that are at the leading edge of market demand (market demand is increasing) or at the back end (demand for the item is dropping)

Whether demand will be higher or lower at the time of award

Whether supply capacity is expected to keep pace with demand

Whether there is a cyclical pattern to supply and demand for the supply or service

Whether awarding 6 months in the future would result in lower prices than an immediate award (or if it would be better to stock up now at today's prices)

What forces (strikes, labor shortages, subcontractor bottlenecks, energy shortages, other raw material shortages) might drive up prices in the near future

What forces might lead the government to expect lower prices in the future

Pricing strategies of firms in the market

Implications for expected prices

Availability of discounts for quantity buys

Which firms in the market are most likely to submit offers to a government solicitation

What features distinguish one service or item of supply from another

Which commercial supplies or services match most closely the government requirements document (as it currently reads in the purchase request)

Apparent tradeoff between features and price



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