



## Research & Development



Best Practices Ordering Guide for Research &  
Development Under the Federal Supply Schedules

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# Acquisition Planning Package Overview

The purpose of the Research and Development (R&D) Acquisition Planning Package is to facilitate Agencies' use of GSA's Multiple Award Schedule (MAS) to procure R&D services. The MAS program provides ordering activities with a simplified and streamlined process for obtaining commercial services. The Acquisition Planning Package is an information resource and starting point for acquisition professionals seeking contract support through the MAS program. The Acquisition Planning Package highlights best practices and suggests recommendations to consider when securing the delivery of professional services.

The Acquisition Planning Package consists of guidance, samples and template documents including:

- Ordering Guide (this document)
- RFQ templates
- Sample Evaluation factors
- Sample PWS/SOWs
- Sample RFIs
- IGCE tool
- Market Research Report template

Note that this Acquisition Planning Package is specific to Research & Development (R&D). A variety of other Acquisition Planning Packages are available [here](#).

## Types of Services Available

Although many Research and Development (R&D) requirements are typically procured on a non-commercial, cost-reimbursable basis, MAS contracts can accommodate a wide variety of commercial R&D: work directed toward the innovation, introduction, and improvement of products and processes. Services may involve any of the following activities:

- Conducting research and experimental development
- Performing analysis of mission
- R&D training
- Technical consulting services
- Scientific research
- Laboratory and clinical services
- Testing services
- Creating and developing designs and specifications
- Environmental research and studies

The various services offered are listed below with their associated NAICS and PSC Codes. A description of Services covered under each NAICS and PSC code can be found at [GSA Schedules eLibrary](#).

# Research & Development Services MAS SINS

SINs	DESCRIPTION
<a href="#">541380</a>	<p>Testing Laboratory Services - Includes testing laboratory services and veterinary, natural, and life sciences; testing services and laboratories; and other professional, scientific, and technical consulting services.</p> <p>Testing and services include, but are not limited to: physical, chemical, analytical, or other testing services; quality assurance; fire safety inspections; training; safety audits; relying upon experimental, empirical, quantifiable data, relying on the scientific method, and professional services, tasks, and labor categories in the fields of biology, chemistry, physics, earth sciences, atmospheric science, oceanography, materials sciences, mathematics, geology, astronomy, veterinary medicine, statistics, systems science, etc., (excludes social and behavioral sciences).</p> <p>Examples of labor categories include, but are not limited to, Scientific Researchers, Biologists, Physicists, Mathematicians, Statisticians, Research Engineers, Meteorologists, Lab Technicians, Veterinarians and Veterinary Services, Chemists, Biochemical Engineers, Research Nurses.</p>
<a href="#">541690</a>	<p>Integrated Logistics Support - Other Scientific and Technical Consulting Services - Services include providing advice and assistance to businesses and other organizations on scientific and technical issues (except environmental).</p> <p>Typical associated tasks include, but are not limited to ergonomic/human performance analysis, feasibility analysis, logistics planning, requirements determination, policy standards/procedures development, conducting research studies, long-term reliability and maintainability, training, consulting, conduct acceptance, functional and post acceptance testing, testing, integration of the payload for flight Customer Agency, support provided during launch, orbital maneuvering and satellite separation from the spacecraft.</p> <p>Example: The full range of life cycle logistics support for the navigation satellite will be identified and designed in this stage including training, operation and maintenance requirements, and replacement procedures.</p> <p>An implementation guide for Space launch Integration Services (SLIS) can be found at <a href="http://www.gsa.gov/psschedule">www.gsa.gov/psschedule</a> - click on "Professional Engineering Solutions".</p> <p>NOTE: Services under this NAICs can not include architect-engineer services as defined in the Brooks Act and FAR Part 2 or construction</p>

	services as defined in the Federal Acquisition Regulation Part 36 and Part 2.
<a href="#">541620</a>	<p>Environmental Consulting Services - Services include providing advice and assistance to businesses and other organizations on environmental issues, such as the control of environmental contamination from pollutants, toxic substances, and hazardous materials; Endangered species, wetland, watershed, and other natural resource management plans; Archeological and/or cultural resource management plans. This includes identifying problems (e.g., inspect buildings for hazardous materials), measure and evaluate risks, and recommend solutions. multi disciplined staff of scientists, engineers, and other technicians with expertise in areas, such as air and water quality, asbestos contamination, remediation, ecological restoration, and environmental law such as Planning and Documentation Services for the development, planning, facilitation, coordination, and documentation of and/or for environmental initiatives (or mandates such as Executive Order 13693 in areas of chemical, radiological, and/or hazardous materials; ISO 14001 Environmental Management System (EMS) and sustainable performance measure development; Environmental Assessment (EA) and Environmental Impact Statement (EIS) preparation under the National Environmental Policy Act (NEPA).</p>
<a href="#">541715</a>	<p>Engineering Research and Development and Strategic Planning - Service include conducting research and experimental development (except nanotechnology and biotechnology research and experimental development) in the physical, engineering and life sciences such as; such as agriculture, electronics, environmental, biology, botany, computers, chemistry, food, fisheries, forests, geology, health, mathematics, medicine, oceanography, pharmacy, physics, veterinary and other allied subjects.</p> <p>Typical tasks include, but are not limited to, analysis of mission, program goals and objectives, program evaluations, analysis of program effectiveness, requirements analysis, organizational performance assessment, special studies and analysis, training, and consulting; requirements analysis, cost/cost performance trade-off analysis, feasibility analysis, developing and completing fire safety evaluation worksheets as they relate to professional engineering services; operation and maintenance, evaluation of inspection, testing, and maintenance program for fire protection and life safety systems, program/project management, technology transfer/insertion, training and consulting.</p> <p>NOTE: Services under this NAICs can not include architect-engineer services as defined in the Brooks Act and FAR Part 2 or construction services as defined in the Federal Acquisition Regulation Part 36 and Part 2.</p>

<a href="#">541420</a>	<p>Engineering System Design and Integration Services - Services include creating and developing designs and specifications that optimize the use, value, and appearance of their products. These services can include determination of the materials, construction, mechanisms, shape, color, and surface finishes of the product, taking into consideration human characteristics and needs, safety, market appeal, and efficiency in production, distribution, use, and maintenance.</p> <p>Associated tasks include, but are not limited to computer-aided design, e.g. CADD, risk reduction strategies and recommendations to mitigate identified risk conditions, fire modeling, performance-based design reviews, high level detailed specification and scope preparation, configuration, management and document control, fabrication, assembly and simulation, modeling, training, consulting, analysis of single or multi spacecraft missions and mission design analysis.</p> <p>NOTE: Services under this NAICs can not include architect-engineer services as defined in the Brooks Act and FAR Part 2 or construction services as defined in the Federal Acquisition Regulation Part 36 and Part 2.</p> <p>An implementation guide for Space launch Integration Services (SLIS) can be found at <a href="http://www.gsa.gov/psschedule">www.gsa.gov/psschedule</a> - click on "Professional Engineering Solutions".</p>
<a href="#">541990</a> <a href="#">TAD</a>	<p>Technical/Application Development Support (TADS) - Includes technical or application development support, such as systems integration and application development.</p>

## Functional Groups and Functional Areas

In response to Office of Management and Budget (OMB) Memorandum [M-19-13](#), the Category Management Leadership Council (CMLC) established 10 government-wide spend categories for purchasing goods and services. Professional Services is one of the 10 government-wide spend categories and Research & Development is one of eight subcategories under the Professional Services Category. The Research &

Development subcategory has five (5) functional groups: (1) Studies & Analysis R&D, (2) Defense R&D, (3) Science & Technology R&D, (4) Medical R&D, and (5) Other R&D. These functional groups include, but are not limited to, various functional areas as described below:

- Data and Analytics; possible SIN(s): [541690](#), [541380](#), [541620](#), [541715](#), [541420](#)
  - Conducting data and analytics research, evaluating data, analyzing research results, reporting analytical results in written and graphical format, scientific peer reviews, and documentation reviews
- Food Studies and Analysis; possible SIN(s): [541690](#), [541380](#), [541715](#)
  - Performing analysis and study of various foods, food processing techniques, food additives, and the effects of various foods on the human body, and cell culture technologies
- Mental Health Studies; possible SIN(s): [541690](#), [541715](#)
  - Study and analysis of mental health and the effect of mental health on an individual, conduct formative evaluations of mental health programs, and perform qualitative analysis of mental health data
- IT Systems; possible SIN(s): [541690](#), [541715](#), [541380](#), [541420](#), and [541990TAD](#)
  - Research IT systems, develop IT systems, integrate IT systems, design IT systems, perform laboratory and field tests, laboratory and field test support, operational support, system architecture, and conduct PRRs, IRRs, PIRs, TRRs, and SATs
- Systems Engineering and Support; possible SIN(s): [541690](#), [541380](#), [541420](#), and [541990TAD](#)
  - System development, system prototyping, perform system testing, information assurance, integrated lifecycle support, configuration management, system engineering, and system and component interfaces
  - Provide technical support, analysis of system contractor proposals and products, and conduct technical evaluations
- Integration Support; possible SIN(s): [541690](#), [541715](#), [541420](#), and [541990TAD](#)
  - Develop system and component interfaces, conduct archival and current literature research, review documents and reports, support design and implementation of systems
- Prototype Development; possible SIN(s): [541690](#), [541380](#), [541420](#), and [541990TAD](#)
  - Develop conceptual and usable prototypes, establish quality control mechanisms, electronic database creation to identify distinguishable characteristics of prototypes, prototype testing, tensile strength test, functionality and feasibility testing

- Science and Technology Research; possible SIN(s): [541690](#), [541380](#), [541715](#), and [541990TAD](#)
  - Research scientific and technological advancements and their applicability to the agency mission, automation R&D, geophysics R&D, spectral R&D, develop analysis plan, and support transition to cutting edge technology
- Product Testing; possible SIN(s): [541380](#), [541380](#), [541715](#), and [541990TAD](#)
  - Conduct product research, product development, and testing, compare performance of competing products, draft reports and make post test recommendations
- Clinical Research; possible SIN(s): [541380](#), [541715](#)
  - Perform clinical research, disease research, cellular research, congenital disorder research, develop reagents, perform assays, and develop technical reports outlining findings and recommendations
- Clinical/Laboratory Testing; possible SIN(s): [541380](#), [541715](#)
  - Perform clinical and/or laboratory testing, provide timely and accurate results to administering agency, draft technical reports, deliver and retrieve samples, maintain HIPPA compliance
- Research Support; possible SIN(s): [541690](#), [541380](#), [541715](#)
  - Provide administrative research support, perform research and assist in drafting white papers, conduct surveys, and perform literature reviews
- Communities R&D; possible SIN(s): [541690](#), [541620](#), [541715](#)
  - Engage and collaborate with community members, empower and integrate with people from diverse backgrounds, draft white papers, and encourage community participation
- Training and Consulting; possible SIN(s): [541690](#), [541620](#), [541715](#)
  - Design and develop R&D training material, travel to staff worksites, teach sampling procedures, design research studies, teach statistical analysis, and provide research process training
- Higher Education; possible SIN(s): [541690](#), [541620](#), [541715](#)
  - Conduct research on survey designs and methodologies, conduct surveys, perform data collection and processing, and draft white papers
- R&D Support; possible SIN(s): [541690](#), [541380](#), [541715](#)
  - Support agency R&D, draft white papers, assist with coordination of R&D activities, plan, coordinate and monitor R&D activities, and conduct technical and scientific evaluations
- Climate and Environmental; possible SIN(s): [541690](#), [541620](#), [541715](#), and [541420](#)



- Conduct desktop surveys, coastal and climate change assessments, and environmental assessments

## MAS Tips and Guidance

MAS contracts offer a number of tools and flexibilities to improve and streamline the buying process.

**Ordering Flexibility:** MAS contracts provide several alternatives to address uncertainties with respect to requirement quantities. Those alternatives are discussed briefly below:

- **Blanket Purchase Agreements (BPAs)**: are a vehicle to fill recurring needs for Schedule services. The benefits of using BPAs include leveraging buying power, saving administrative time, and reducing overall procurement transactions. BPAs allow for substantially quicker turnarounds on orders through the use of streamlined ordering procedures, while reducing administrative burdens of repetitive, individual orders.
  - **Multiple-award vs. Single-award BPAs:** both multiple-award and single-award BPAs are allowed under MAS. To encourage competition, the FAR establishes a preference for multiple-award BPAs. The number of BPAs to be established is within the discretion of the ordering activity and should maximize the effectiveness of the BPA(s). In determining whether single or multiple BPAs are appropriate, the Agency should consider:
    - The scope and complexity of the requirement(s)
    - The benefits of ongoing competition and the need to periodically compare multiple technical approaches or prices
    - The administrative costs of multiple BPAs
    - The technical qualifications of the Schedule contractor(s)
- **Time and Materials (T&M) or Labor Hour (LH) contract/CLIN types:** may be used when it's not possible at the time of placing the contract to estimate accurately the extent or duration of the work or to anticipate costs with any reasonable degree of confidence.
  - Requirements should be structured to maximize the use of FFP CLIN(s) to the maximum extent practicable. This may result in a "hybrid" order that, despite having T&M or LH elements, is classified as FFP for reporting purposes.
  - **Order Level Materials (OLMs)**: OLMs are supplies and/or services acquired in direct support of an individual task or delivery order placed against a GSA Schedules Program contract or Blanket Purchase Agreement (BPA), when the supplies and/or services are not known at the time of contract or BPA award.

- OLMs are only authorized for inclusion under a T&M or LH CLIN. A determinations and findings (D&F) is required for the T&M or LH portion of the order, regardless of dollar value.
  - The value of OLMs in a task or delivery order, or the cumulative value of OLMs in orders against an FSS BPA, cannot exceed 33.33% (note: travel costs do not count towards this limitation).
  - The OCO should verify that the OLM SIN is awarded on a contractor's Schedule contract prior to order placement (see [gsaelibrary.gsa.gov](https://gsaelibrary.gsa.gov) to obtain this information). Contractors who have not been awarded the OLM SIN are not authorized to receive orders that include OLMs
  - The OCO is responsible for: Defining any known OLM categories (e.g., computer usage charges, office supplies, labor); Establishing an NTE ceiling price for OLMs; Approving proposed OLM indirect cost fixed amount and determining it is fair and reasonable (if applicable)
- **Options:** Options may be included on orders placed against GSA MAS contracts, provided that the options are clearly stated in the requirement and are evaluated as part of the ordering activity's "best value" determination.
  - Order options are administered under the procedures outlined at FAR 17.2;
  - Orders must include the applicable clauses prescribed at FAR 17.208 if the ordering activity plans to use options.
  - Note that if a 6 month extension (per FAR 52.217-8) is included, the pricing for that extension should be included in the evaluation.
- **Other MAS Features:**
  - No requirement to synopsise - GSA Schedules have been synopsized at the contract level in beta.SAM.gsa and satisfy the requirements of the Competition in Contracting Act (Pub. Law 98-369) and FAR Part 5, Publicizing Contract Actions. Ordering activities "shall not" synopsise (see FAR 8.404(a)).
  - Subcontracting plans are issued and administered at the contract level, and are therefore not required for orders issued against GSA Schedules.
  - GSA performs the contractor responsibility determination IAW FAR Part 9 at the contract level. A separate determination of responsibility is not required at the order level.
  - **Socioeconomic set asides:** COs may, at their discretion, set aside orders or BPAs for small businesses or subcategories of small businesses identified in [FAR 19.000\(a\)\(3\)](#). It is important to note that 80% of all GSA Schedule holders are small businesses and the simplified ordering procedures for Schedule set-asides are prescribed in FAR 8.405-5, not

## Part 19.

- Orders against Schedule contracts are not exempt from:
  - Acquisition planning as required by [FAR Part 7](#)
  - Agency specific supplements
  - Bundling requirements (ref [FAR 7.107](#))

### Ordering Procedures and Resources:

- **[GSA Market Research as a Service \(MRAS\)](#)**: a free service available to customers to facilitate market research on GSA contract vehicles. The MRAS team issues streamlined, effective Requests for Information (RFI) which: define and identify suppliers and contracts; research and identify supplier capabilities; access hundreds of existing Market Reports; and provide a comprehensive market plan, including contract suggestions, socio-economic considerations, etc.
- Other GSA Market Research Tools include:
  - [Discovery](#)
  - [eLibrary](#)
  - [eBuy](#): If market research reveals that the number of capable and interested vendors is low, the use of eBuy will serve to notify all vendors on the Schedule of the selected SIN about the requirement
- **[Contractor Team Arrangement \(CTA\)](#)**: two or more GSA Schedule contractors working together to provide a total solution to the ordering activity. The CTA allows the contractor to meet the government agency needs by providing a total solution that combines the supplies and/or services from the team members' separate Schedule contracts. It permits contractors to complement each other's capabilities in order to compete for orders for which they may not independently qualify. GSA encourages the use of CTAs to meet buyer's requirements. *Note: FAR 9.6, Contractor Team Arrangements, does not apply to GSA Schedules teaming.* Under GSA Schedules, Teaming allows contractors to use their individual GSA Schedules to develop a solution for the government in which each contractor has privity of contract with the Government.
- **Evaluation factors**: Ordering activities have considerable latitude in structuring their procurement and can consider both price and other factors (e.g., past performance, technical capabilities and qualifications of key personnel) in selecting Schedule contractors. When determining "best value," an ordering activity may take advantage of the full spectrum of "best value" techniques as defined in FAR 2.101, from lowest-priced technically acceptable (LPTA) through a full trade-off process. When determining which nonprice evaluation factors to include in an RFQ, ordering activities should decide how factors will be considered and their relative importance to other nonprice factors. This

procurement guide includes various sample evaluation factors common to professional services contracting.

- **Solicitation Methods:** [FAR 8.405-2\(c\)](#) allows solicitations for professional services requirements with a statement of work to be solicited:
  - Via GSA [eBuy](#); or
  - By providing the RFQ (e.g., via email) to as many schedule contractors as practicable, consistent with market research, to reasonably ensure that quotes will be received from at least three contractors that can fulfill the requirements (Note: <SAT, must be sent to at least 3)
- **Checklist:** Use the [GSA Schedule Order: Contract File Checklist](#) [PDF - 368 KB] to award task or delivery orders against Schedules and to establish Blanket Purchase Agreements (BPAs) against Schedule contracts.
- **Unsuccessful notifications:** If an unsuccessful quoter requests information on an award that was based on factors other than price alone, a brief explanation of the basis for the award decision must be provided (refer to FAR 8.405-2(d)). The FAR Part 15 debriefing requirement does not apply.