Definition:

- A **specification** is an explicit set of requirements to be satisfied by a material, product, or service. (ASTM definition)
- Used when buyers and suppliers need to understand and agree on all requirements
Responsibility for Specifications

- The using departments are generally responsible for the initial draft of the specifications.
- Purchasing will review the initial draft and may have additional questions to ask using department while fine tuning specifications.
- Using department and Purchasing will generally collaborate as a team for the final draft of specifications.
- It is so important to give Purchasing as much information and detail about the procurement as possible; holding back information may delay the procurement or not get desired product.

2 Types of Specifications

- **Scope of Work:** A step-by-step detailed explanation of the professional or general services you want performed by the supplier. Can be either a design specification or performance specification.

- **Technical Specifications:** A clear, detailed and exact description of the goods or construction services you would like to purchase from the supplier. Can be either a design specification or performance specification.

Specifications

- **Design Specifications:** Tell suppliers what is wanted and/or how to do it. *The entity is responsible for the end product functioning as desired.*

- **Performance Specification:** Describes what is wanted, but leaves it up to the supplier to determine how it is to be accomplished. *Supplier is responsible for the product working as specified.*
Terminology

- **Bid**: Solicitation for goods or services made to the lowest responsive and responsible bidder, usually based mainly on price.
- **Request for Proposal (RFP)**: Solicitation for services which take additional criteria (other than price) in consideration submitted in the form of a response to evaluation criteria specified in the solicitation. Pricing usually negotiated.
- **Contract**: Document which specifies the formal agreement of terms and conditions between parties of a procurement.

Developing Technical Specifications

When are Technical Specifications typically needed?

- Bid for Goods
- Bid for Construction Services
- Bid for Furnish & Install
When is a Scope of Work typically needed?

- Request for Proposal (RFP) for Professional Services
- Bid or RFP for General Services
- Contract for Professional Services

Example: Specifications

- Pencil
- Office Supply Catalog: 343 pencils
- Mechanical Pencil
- Sketching Pencil
- Drawing Pencil
- Golf Pencil
- Colored Pencil
- Erasable Pencil

Example: Specifications

- BETTER: Pencil, #2 Lead, Wood, with Eraser
- BEST: Paper Mate Mirado Wooden Pencil, #2, Soft Lead, 100% Cedar, Eraser, Hexagonal Barrel, Yellow, 100% Recycled Content, PMA Certified Non-Toxic, 12/Dozen Papermate - PAP02097
Content of a Specification

- Descriptive title and scope
- Contact for questions on specifications
- Contact for contract administration
- Importance and intended use of product
- Terminology and definitions

Content of a Specification

- Answers questions: Who, what, when, where and how
- Design Specification: attributes of the product’s physical nature which are measurable (targets, +/- tolerance ranges)
- Performance Specifications: attributes of the performance of a particular system or service which are measurable (targets, +/- tolerance ranges)
- Drawings, plans, photographs, visual demonstration of product
- Workmanship requirements
- Certifications requirements

Content of a Specification

- Safety requirements
- Environmental requirements
- Delivery requirements
- Quality requirements, sampling, inspections, acceptance criteria
- Testing methods for assuring compliance
- Return, replacement, rework procedure
Where Can I Find Specifications?

- Company Catalog
- Internet Research
- Previous Bids
- Peers/Colleagues
- Professional Organizations
- Industry Standards
- Suppliers
- Joinder Agreements

Specifications

- Proprietary Specifications: Limits Competition; Increases Costs
- Effective enforcement of a specification is necessary for it to be useful: Test and return or replace if not correct
- Over-specifying: Will pay for quality or functions you don’t really need

Exercise

Technical Specifications

- What is a goods procurement that you have coming up in the near future?
- How would you describe the product?
- What means would you use to measure to determine if you got what you specified?
- Did you describe a design or performance specification?
How would you like a tool to give to the using department to help them create their specifications?

Using Department Guide to Developing Specifications

- A tool developed to help using departments write their specifications
  - Section 1: Required Information
  - Section 2: Potential Suppliers
  - Section 3: Specifications
  - Section 4: Specification Information, Specifications Checklist, Sample Specifications

Section 1 – Required Information

Section 2 – Potential Suppliers
Section 3 - Specifications

Section 4 – Specification Information

Section 4 – Specifications Checklist
Specifications for services are usually more project-unique than goods. They describe what the supplier is supposed to do, require more customization, are more complex, and time-consuming. If the contract doesn’t specify it, the supplier doesn’t have to do it or provide it.
2 Types of Scope of Works for Services:

- Design Specification: More detailed; used for a service contract in which the tasks are known and identifiable.
- Performance Specification: Less detailed; used for a service contract, usually solicited by a RFP, in which only the goal is known, the tasks are not known or identifiable. Leaves it up to supplier how to accomplish.

Using Department Guide to Developing a Scope of Work

- Section 1: Required Information
- Section 2: Potential Suppliers
- Section 3: Scope of Work
- Section 4: Sample Scope of Work

Section 1: Required Information

- Purchase requisition number
- Date
- Department contact name, telephone, e-mail address
- Department name
- Project budget
- Project title
Section 2: Potential Suppliers

- Companies who have successfully supplied the service in the past
- Companies you know of that can supply the service
- Companies who have expressed an interest
- Companies who have registered in your financial software system as a supplier to provide the service
- Companies others have used for the service

Section 1 – Required Information

Section 2 – Potential Suppliers

Section 3: Scope of Work

- Project Description
- Project Location
- Project Timeline and Deliverables/Milestones
- Definitions
- Scope of Services, by Task, Phase, Step, etc.
- Scope Questions
Section 3 – Scope of Work

Section 4: SAMPLE Scope of Work

- Questions to help think of entire scope
- Recommend deliverables and timelines are tied to each other
Section 4 – SAMPLE Scope of Work

Hints for Writing a Scope of Work

- Answers question: What do I need, when do I need it and how will I know it is good when I get it?
- Break down chronologically services you will need and include all tasks/steps.
- Tie deliverable or milestone to a due date.
- The contract should tie payment schedule to deliverables/milestones (agreed to during negotiations).

Hints for Writing a Scope of Work

- Does the supplier need any information from you to perform the services?
- If the entity is harmed financially if the supplier does not perform, purchasing representative should include liquidated damages.
- Make sure you can measure if the work is complete.
- If the supplier is not performing, make sure you can demonstrate non-performance.
- Weak design specifications may get you less service than expected.
Hints for Writing a Scope of Work

- SOW should encourage competition.
- Do not tell the supplier how to do the work (unless using a design specification).
- Use simple language and short sentences.
- Use the same descriptive terminology throughout to avoid confusion.
- Include or reference applicable specifications, illustrations, diagrams, tables, etc., if they assist in describing the work.

Hints for Writing a Scope of Work

- Use mandatory language when stating a work requirement (“shall”).
- Avoid ambiguous statements and words with multiple meanings.
- Include only necessary, essential requirements.
- Do not repeat requirements.
- Do not expect a supplier to infer a requirement. Be specific.

Exercise

- Scenario: You need to hire a moving company to move your entire office to a new location.
- Exercise: Write a Scope of Work for the needed moving services.
Exercise

- Summary of Scope of Work
- Lessons learned

Summary

- Use the tools learned to determine appropriate specifications
- Weak specifications will get less than expected
- Think chronologically
- Be as detailed as appropriate
- Purchasing representative can provide assistance

References

- Wikipedia
- A Statement of Work Primer, Calvin Brusman, April 1994, *NAPM Insights®* Vol. 5, No. 4
Questions?