**PROCUREMENT IN PROJECT ENVIRONMENT**

**TOPIC 1: INTRODUCTION TO PROCUREMENT PROJECTS AND CONTRACTS**

# Procurement

## Definitions of Procurement

There are many definitions of procurement, many of which are:

* The Public Procurement and Disposal of Assets Act, 2003, defines procurement as the acquisition by purchase, rental, lease, hire purchase, license, tenancy, franchise or any other contractual means of any types of works, services or supplies of any combination.
* Leenders and Fearson (1989) define procurement as the process of identifying and selecting the supplier, negotiating prices, paying for goods and follow up for delivery and contracting suppliers to guarantee continuity of suppliers.
* Andrew Kidd defines procurement as a business management function that ensures identification, sourcing, access and management of the external resources that an organisation needs or may need to fulfill its strategic objectives.

Procurement exists to explore supply market opportunities and to implement resourcing strategies that deliver the best possible supply outcome to the organisation, its stakeholders and customers.

Procurement includes activities and events, before and after the signing of a contract as well as the general management of activities associated with a range of contracts. These include:

* Pre-contract activities such as planning needs, identification and analysis and sourcing, etc.
* Post-contract activities such as contract management, supply chain management and disposal.
* General activities such as corporate governance (system of rules, practices and processes by which a firm is directed and controlled), supplier relationship management, risk management and regulatory compliance.

## Aim of Procurement

Every organisation needs items to carry out its operations. These items can be capital equipment, raw materials, components, repair and maintenance materials, consumables, services, stationery, packaging materials, vehicles, etc. The aim of procurement is to avail items that must satisfy what are referred to as ***6Rs*** of procurement. This means that:

Procurement must avail items that are the ***right products*** of the ***right condition/quality*** in the ***right quantity*** from the ***right source/supplier*** at the ***right price/cost*** and at the ***right time***. These 6Rs are explained as follows:

1. **Items must be the *right products***.

This means that items must be the exact products required. For example, if Product P is required, exactly Product P and not Product Q must be delivered. Similarly, if Product X is required, exactly Product X and not Product Y must be delivered. Therefore, delivering items that are the ***right products*** leads to effective and smooth running of the organization’s operations because the exact required items are availed.

1. **Items must be of the *right condition/quality***.

Here quality is taken to mean ***fitness for use***. If they are to be fit for use, items must be of the standards specified by the buying firm. If the items are of good quality, the output and/or outcome will also be of good quality. On the other hand, if the items are of poor quality, the output and/or outcome will also be of poor quality. Therefore, availing items of the ***right condition/quality*** leads to good quality outputs because good quality items/inputs are used.

1. **Items must be available in the *right quantity***.

This means that items must be availed in the exact quantity they are required for the organisation’s work to be done. If too few items are availed, some work will not be done. This leads to lost opportunities in the market place. On the other hand, if too many items are availed (i.e. if there are excess materials), some will remain unused. This leads to wastage of resources and storage problems. Therefore, availing items in the ***right quantity*** leads to efficient and smooth running of the organisation’s operations because items are availed optimally.

1. **Items must be available from the *right source/supplier***.

This means that items must be available from suppliers who are trusted when it comes to doing what they say they will do. These are suppliers who care about the well-being of the buying firm. These suppliers work collaboratively with their customers. That is, they have good working relationships with their customers. These suppliers have many, if not all, of the attributes of a good supplier.

1. **Items must be available at the *right price/cost***.

The right price is not necessarily the lowest price. Sometimes, it can be the highest price depending on the quality and features required in the items. In most cases, the right price is determined by consider- ing the ***total cost of ownership (TCO)*** concept. The TCO of a product includes its purchase price and other costs of owning/using the product and disposing the product at the end of its useful life. An item with the ***lowest TCO*** is the one at the ***right price/cost***.

1. **Items must be available at the *right time***.

This means that items must be available at the exact time they are required for the organization’s work to be done. For example, if items are required at 8:00 am, they must be availed at exactly 8:00 am and not 10:00 am Similarly, if items are required at 2:00 pm, they must be availed at exactly 2:00 pm and not 4:00 pm. Therefore, availing items at the ***right time*** leads to smooth performance of the work because its items are available at the exact time they are required.

## Objectives of Procurement

**Procurement objectives can be categorized in two; general and specific objectives:**

### General Objectives

The general objectives of procurement are to:

1. Provide the organisations with constant flow of goods and services to meet its needs.
2. Ensure continuity of supply by maintaining effective relationships with existing sources and developing other sources of supply either as alternatives or to meet emerging or planned needs.
3. Buy efficiently and wisely, obtaining by ethical means the best value for every coin spent.
4. Manage inventory so as to give the best possible service to users at lowest cost.
5. Maintain sound co-operative relationship with other departments, providing information and advice as necessary to ensure the effective relationship of the organisation.
6. Develop staff policies, procedures and organisation to ensure the achievement of set objectives.

### Specific Objectives

The specific objectives of procurement are to:

1. Select the best suppliers in the market.
2. Help generate the effective development of new products.
3. Protect the company’s cost structure.
4. Maintain the correct quality/value balance.
5. Monitor supply market trends.
6. Negotiate effectively in order to work with suppliers who will seek mutual benefit through economically superior performance.

## 1.4 Types of Procurements

Types of procurements include the following: procurements can be categorized into three types;

### Works

These include construction, design, rehabilitation, maintenance and repair of buildings, bridges, roads, plants, etc.

### Supplies

These include goods procured such as materials, drugs, food stuffs, etc.

### Services

These include activities such as revenue collection contracts, cleaning, studies for designs and provision of technical assistance and training performed by a consultant.

# Procurement Projects

Generally speaking, a procurement project is a project concerning the procurement of goods and services. The meaning of the word ***project*** will be given in Topic 2.

## Types of Procurement Projects

There are three general types into which procurement projects can loosely be grouped: ***traditional procurement projects***, ***repeated change procurement projects*** and ***radical change procurement projects***.

### Traditional Procurement Projects

**Traditional procurement projects** are projects such as sourcing new production machinery, renegotiating a contract for energy or maintenance services that have traditionally been well within the capability of purchasing departments. Clear and simple objectives can be set and the way to do this is well established.

A comparison would be building projects and this type of project typically needs strong control and a clear process. The requirements are mainly hard, and the tried and tested project management techniques such as network analysis and Gantt charts work well.

Common challenges come from familiarity: similar projects have been done before so there is a

temptation to think it should be easy and this one should be quicker, cheaper and better. At the same time, less effort and attention are devoted to projects which have been done before.

A strong approach would involve clear direction and control from one person or a small team, with input from some others. Responsibilities need to be clear and adhered to. Timing, resources and so on need to be carefully planned, but as the outputs are tangible and identified, this is not too difficult.

Established methods of project planning and control such as Gantt charts, network analysis and responsibility charts, work well. Stakeholders and soft factors should not be neglected, but take second place. A fairly standard project management process can be used, even something like PRINCE2, perhaps simplified for smaller projects.

Traditional purchasing projects are the ***forgotten*** projects containing the sort of activities traditionally associated with purchasing. The technology is stable, the specifications clear, the objectives well defined and generally focused on getting the right product at the lowest cost. The impact on the business tends to be low.

### Repeated Change Procurement Projects

**Repeated change procurement projects** are the projects where the purchasing department can lead or assist substantial change for the organisation, leading to competitive advantage or large efficiency or cost gains. They have become increasingly important to organisations for main reasons.

Category management and Six Sigma are examples, where a range of projects are focused on different areas or subjects but follow a very similar process. For example Cycle time to manufacture solar cells in a research lab.

* Defects in the manufacturing of natural gas dehydrators.
* Number of weld repairs in pipeline construction **projects**.
* IT system downtime for an accounting firm.
* Medicare billing rejections for a home healthcare organization.

The requirements include a strong project management process, flexible enough to be adapted to different areas, with good stakeholder management incorporated. Although similar projects may be working in parallel, many stakeholders may resist change and struggle to accept the project.

Challenges will change as more projects are carried out. When the first project starts, there will be little experience on which to base the process. There is a danger of having clear objectives but a team unable to find the way to achieve them. Once experience builds, the process becomes more familiar and the same things happen as with traditional projects: less focus and effort with higher expectations. Finally, teams become entrenched in the process and there is a danger that they keep on carrying out the projects when the objectives are no longer clear or necessary.

The best approach is exemplified by the Six-Sigma experience. As a basis, a very supportive environ- ment with senior management buy-in is central. The process can then be established, with stakeholder and change management as a part of it. Embedded within that process are the specific tools for that type of project: the DMAIC cycle and tools for Six Sigma, market and requirements analysis tools for category management.

Six Sigma or category management involve a series or programme of projects which tend to do different things, but in a similar way. They will typically involve change, many stake-holders, cross- functional involvement and the objectives may well develop through the project.

### Radical Change Procurement Projects

**Radical change procurement projects** are the projects like developing a Supplier Relationship Management (SRM) process from scratch, e-enabling purchasing, implementing an ***environmentally sound*** purchasing policy. The projects are very new and the objectives are unclear. At the same time change is likely to be substantial and stakeholders varied and important.

The fixed processes of the other two types are not appropriate, as there is no experience to build on. These projects need an approach which can accommodate uncertainty and flexibility. At the same time, progress and success are needed and the requirement to control cost and deliver valuable outcomes remains.

The challenges are widespread. It is easy to do something: buy some e-purchasing software, draw up an SRM process, write a simple policy, but these are only a small part of successful projects in these areas. All the risks of projects come together here: the project could wander off course, delivering little, it could lose momentum and die away, it could divert resources from other more important activity, and finally, it could deliver something useless to the organisation or worse, based on objectives which are out of date, misunderstood or just plain wrong.

The approach must involve a drive to understand objectives, strong but flexible control and effective change management. It must be able to cope with uncertainty and change in the objectives and the requirements of the project. Typically the project will be broken down into phases, the first having a clear goal and work can be planned for each phase as it is approached. As an example, the first phase is often focused on building agreement on the need for and goal of the project, combined with gathering data on what is available or has been done by others.

Examples of these projects include:

• Creating a new procurement department or developing a process for supplier collaboration where nothing exists.

• Setting up a pipeline of new purchasing talent.

These projects are typically cross-functional, with complex stakeholder relationships and fuzzy, long- term objectives. They focus on longer-term value to the business and perhaps will involve a different management approach.

## 2.2 Handling New Procurement Projects

The right approach: do not get kicked or thrown off. Dealing with a new project is a little like dealing with a strange animal: the right approach can pay off, the wrong approach can lead to problems: bites, scratches, kicks or worse.

If you have to tackle an animal, you might first identify what type it is — horse, cat, bird, hedgehog- then find out what the dangers were. A kick from a horse, scratch from a cat, the shock of handling might harm the bird; while a hedging offers little worse than a prick from its spine or a lot of fleas.

You might then take an approach which suited the animal: some recommended gloves for a hedgehog, wrapping a cat in a towel, not walking behind a horse, minimum interference with a wild bird and so on. If the animal turns out to be a tiger, however, professional help might be needed, just as with a really complex project.

Similarly with procurement projects, the first step is to identify the type, then the requirements and dangers, and plan an approach which matches these.

# Procurement Contracts

Generally speaking, a procurement contract is a contract concerning the procurement of goods and services.

## Description of Contracts

By definition, *A* [***contract***](http://en.wikipedia.org/wiki/Contract) ***is a written or oral legally-binding agreement between the parties identified in the agreement to fulfill the terms and conditions outlined in the agreement***. A prerequisite requirement for the enforcement of a contract, amongst other things, is the condition that the parties to the contract accept the terms of the claimed contract. Historically, this was most commonly achieved through signature or performance, but in many jurisdictions — especially with the advance of electronic commerce — the forms of acceptance have expanded to include various forms of electronic signature.

Contracts can be of many types, e.g. sales contracts (including leases), purchasing contracts, [partnership agreements,](http://en.wikipedia.org/wiki/Partnership_agreement) [trade agreements](http://en.wikipedia.org/wiki/Trade_agreement), and intellectual property agreements.

* A **sales contract** is a contract between a company (the seller) and a [customer](http://en.wikipedia.org/wiki/Customer) that where the company agrees to sell products and/or services. The customer in return is obligated to pay for the product/services bought.
* A **purchasing/procurement contract** is a contract between a company (the buyer) and a supplier who is promising to sell products and/or services within agreed terms and conditions. The company (buyer) in return is obligated to acknowledge the goods/or service and pay for liability created.
* A **partnership agreement** may be a contract which formally establishes the terms of a partnership between two legal entities such that they regard each other as 'partners' in a commercial arrange- ment. However, such expressions may also be merely a means to reflect the desire of the contract- ing parties to act ***as if*** both are in a partnership with common goals. Therefore, it might not be the [common law](http://en.wikipedia.org/wiki/Common_law) arrangement of a partnership which by definition creates fiduciary duties and which also has ***joint and several*** liabilities.

Common commercial contracts include employment letters, sales [invoices](http://en.wikipedia.org/wiki/Invoice), [purchase orders](http://en.wikipedia.org/wiki/Purchase_order), and utility [contracts.](http://en.wikipedia.org/wiki/Contract)

Complex contracts are often necessary for [construction](http://en.wikipedia.org/wiki/Construction) projects, goods or services that are highly [regulated,](http://en.wikipedia.org/wiki/Compliance_%28regulation%29) goods or services with detailed technical specifications, [intellectual property](http://en.wikipedia.org/wiki/Intellectual_property) agreements, and [international trade.](http://en.wikipedia.org/wiki/International_trade)

## Procurement Contract Terminology

Before analyzing the various types of procurement contracts, one should be familiar with the termino- logy found in them. This terminology is as follows:

* The **target cost** or **estimated cost** is the level of cost that the contractor will most likely obtain under normal performance conditions. The target cost serves as a basis for measuring the true cost at the end of production or development. The target cost may vary for different types of contracts even though the contract objectives are the same. The target cost is the most important variable affecting research and development.
* **Target profit** or **expected profit** is the profit value that is negotiated for, and set forth, in the contract. The expected profit is usually the largest portion of the total profit.
* **Profit ceiling** and **profit floor** are the maximum and minimum values, respectively, of the total profit. These quantities are often included in contract negotiations.
* **Price ceiling** or **ceiling price** is the amount of money for which the government is responsible. It is usually measured as a given percentage of the target cost, and is generally greater than the target cost.
* **Maximum fees** and **minimum fees** are percentages of the target cost and is established outside the limits of the contractor's profit.
* The **sharing arrangement** or **formula** gives the cost responsibility of the customer to the cost responsibility of the contractor for each shilling spent. Whether that shilling is an overrun or an under-run shilling, the sharing arrangement has the same impact on the contractor. This sharing arrangement may vary depending on whether the contractor is operating above or below target costs.
* The **production point** is usually that level of production above which the sharing arrangement commences.
* **Point of total assumption** is the point (cost or price) where the contractor assumes all liability for additional costs.

## Categories of Procurement Contracts

Procurement contracts can be categorised, in terms of their monetary values and risks involved in them and mapped onto a contract value-risk matrix as shown in Figure 1.

Low

High

Contract Risk

High

Contract Value

|  |  |
| --- | --- |
| Drive/Profit Contracts | Critical/Strategic Contracts |
| Acquisition Contracts | Secure/Security Contracts |

Low

Figure 1: Categories of Contracts on a Contract Value-Risk Matrix

These contract categories can be described as follows:

1. **Critical/Strategic Contracts: High Value and High Risk contracts** — With these contracts, procurement needs to focus its effort to manage the real risks to the business and consider trade- offs to manage costs and risks. In this sector any percentage increase in cost will have a big impact on the bottom line. Examples are buildings, roads, energy and motor vehicles.
2. **Secure/Security Contracts: Low Value and High Risk** — These contracts, while of low value, are vital to the business and have a high potential for risk — here the procurer should be willing to pay the cost. Examples are timber, textiles and chemicals.
3. **Drive/Profit Contracts: High Value and Low Risk** — With these contracts, the focus is obtaining the best value, risk is minimal so the focus will be on buying a more Examples are business travel, pharmaceuticals, office machinery and office computers, IT and computer services, and pulp and paper.
4. **Acquisition Contracts: Low Value and Low Risk** — With these contracts, the emphasis sustainable product at or below the price of competitor products. Here the focus is on minimizing the transactional cost of procurement. Examples are consumables (white goods) and copier paper.

## Classification/Types of Procurement Contracts

A wide selection of procurement contracts is necessary to provide the flexibility needed for the procurement of the goods or services. The contract compensation arrangement provides:

1. the degree and timing of the cost responsibility assumed by the supplier,
2. the amount of profit or fee available to the supplier, and
3. the motivational implications of the fee portion of the compensation arrangements.

According to compensation arrangements, procurement contracts can be classified into three broad categories:

1. Fixed-price contracts,
2. Cost-reimbursement or cost-type contracts,
3. Unit-rate contracts.

### Fixed-Price Contracts

**Fixed-price contracts** (also known as **firm-fixed-price contracts** and **lump-sum contracts**) are agreements that define a total price for the product the seller is to provide. These contracts must clearly define the requirements the vendour is to provide. These contracts may also provide incentives for meeting or exceeding contract requirements — such as meeting deadlines — and require the seller to assume the risk of cost overruns.

When goods are supplied (or work is executed) based on a fixed-price contract, the buyer orders the supplier to perform the required activities at a fixed price, and to have the goods delivered (or work completed) by a predetermined date. If prior to delivery of the goods (or completion of the work), the supplier finds that the effort is more difficult or costly than anticipated, the supplier is still obligated to deliver the goods (or complete the work). Further, the supplier will receive no more than the previously agreed-on amount. The amount of profit the supplier receives will depend on the actual cost outcome. There is no maximum or minimum profit limitation in fixed-price contracts. A fixed- price arrangement is normally used in situations where specifications are well defined and cost risk is relatively low.

As the price is fixed, it is in the supplier’s interest to execute the work as efficiently as possible. The fixed price is an incentive to complete the work, or deliver the goods, as quickly as possible within the agreed term.

The advantages and disadvantages of fixed-price contracts are given in Table 1.

Table 1: Advantages and Disadvantages of Fixed-Price Contracts

### Advantages Disadvantages

The principal/buyer knows exactly where he/she stands financially.

After completion of the work there is no need for settlements because all risks are carried by the supplier.

It is difficult to get insight into the supplier’s cost breakdown if the buyer lacks expertise; this problem can be avoided by requesting quotations from more than one supplier.

Preparation requires time – the question is whether there is enough time to prepare a detailed specification and have a formal bidding procedure.

There is a firm completion date. One does not know in advance which supplier will turn

 out to be the best.

### Cost-Reimbursement/Cost-Type Contracts

In the case of a **cost-reimbursement contract** (also referred to as **cost-Type contract**), the nature and scope of the activities to be performed are not established in advance. The principal or hirer orders the supplier to perform the required activities at a predetermined hourly rate, sometimes in combination with a prearranged percentage to cover the overhead costs. Settlement follows after the completion of the activities based on the supplier’s day reports, stating the man hours worked, and (if relevant) the materials which have been consumed.

Under this arrangement, the buyer’s obligation is to reimburse the supplier for all allowable, reason- able, and allocable costs incurred, and to pay a fixed fee. The supplier’s cost accounting practices must meet commonly accepted standards and be open to the customer/buyer. Most cost arrangements include a cost limitation clause that sets an administrative limitation on the reimbursement of costs.

Generally, under a cost-type arrangement, the supplier is obligated only to provide his/her ***best effort***. Usually, neither performance nor delivery is guaranteed. Cost-type arrangements are normally used when:

* Procurement of research and development which involves high technical risk.
* Some doubt exists that the project can be successfully completed.
* Product specifications are incomplete.
* High-shilling, highly uncertain procurements such as software development are involved.

These contract types pay the seller for the product. In the payment to the seller there is a profit margin

— the difference between the actual costs of the product and the sales amount. The actual costs of the product fall into two categories:

* **Direct costs** — costs incurred by the project in order for the project to exist. Examples include equipment needed to complete the project work, salaries of the project team, and other expenses tied directly to the project’s existence.
* **Indirect costs** — costs attributed to the cost of doing business. Examples include utilities, office space, and other overhead costs.
* Cost-reimbursable contracts require the buyer to assume the risk of cost overruns.

There are three types of cost-reimbursable contracts:

* Cost plus fixed fee
* Cost plus percentage of costs
* Cost plus incentive fee

The advantages and disadvantages of cost-reimbursable contracts are given in Table 2.

Table 2: Advantages and Disadvantages of Cost-Reimbursable Contracts

### Advantages Disadvantages

The principal/buyer obtains an exact picture of the cost structure of the work.

The principal is free in his/her choice of suppliers; it is known in advance what supplier he/she will be dealing with.

There is no predetermined fixed price, so the buyer is not quite sure about the financial consequences.

There is no incentive to work faster, as the supplier is reimbursed for every hour he/she works; every setback is charged to the principal.

There is no certainty about completion date.

The principal is not forced to specify exactly what he/she wants. Frequently the specification is left to the

 supplier for the sake of convenience.

Due to the uncertainty of the final cost, many buyers avoid working with cost-reimbursable contracts. Some only use them in the case of specific, minor maintenance/repair activities, for which the financial risks are relatively clear. Cost-reimbursable contracts are not without problems and several points have to be discussed with the supplier in advance (see Table 3).

Table 3: Aspects to be Considered when Contracting on a Cost-Reimbursable Basis

* Wages and salaries
* Percentage for general expense
* Profit percentage/markup
* Reporting procedures for hours worked and consumption of materials
* Costs of tooling and special equipment
* Costs related to coordinating the work of third parties
* Agreement on cost estimate for extra work
* Agreement on what to be supplied by buyer
* Agreement on what facilities (telephone, electricity, housing) to be provided by buyer/supplier
* Key personnel to be assigned on the job by contractor
* Arrangement of required licences and permits from local authorities
* Selection of sub-suppliers of contractors

### Unit-Rate Contracts

**Unit-Rate Contracts** are sometimes called **Unit Price Contracts** or **Time and Material (T&M) contracts**. They are ideal for instances when an organisation contracts out a small project or for instances when smaller amounts of work within a larger project are to be completed by a vendor. T&M contracts, however, can grow dangerously out of control as more work is assigned to the seller.

Unit-rate contracts determine the cost per activity for standardized routine work. Petrochemical companies, for example, annually negotiate unit-rates for simple installation and maintenance activities which are subcontracted to suppliers (for example unit-rate per metre of piping that is installed, or unit- rate per square metre of ground floor which is cleaned). Unit-rate contracts are used for activities which are standardised but which are difficult to estimate in terms of volume and time.

### Deciding between Fixed-Price and Cost-Reimbursable Contracts

The decision in favour of either fixed-price or cost-reimbursable contracts is determined by a number of factors such as:

* **Comprehensiveness of the specification**. The availability of extensive specifications is a crucial prerequisite of lump-sum contracting. Absence of specifications makes a fair comparison of the various quotations impossible.
* **Available time**. Does the buyer have enough time for a tender procedure and price negotiations or should the work be started immediately?
* **Technical expertise**. If the work requires specialized knowledge and skills, a cost-reimbursable contract is often preferred.
* **Knowledge of the industry**. The degree to which the buyer knows the methods and price arrangements operating in that particular industry.

## Variations of Procurement Contracts

The different variations of procurement contracts are summarized in Table 4. Table 4: Summary of Procurement Contract Types

|  |  |  |  |
| --- | --- | --- | --- |
| **Contract Type** | **Acronym** | **Attribute** | **Risk Issues** |
| Cost Plus Fixed Fee | CPFF | Actual costs plus profit margin for Seller. | Cost overruns represent risk to the buyer. |
| Cost Plus Percentage of Cost | CPPC | Actual costs plus profit margin for seller. | Cost overruns represent risk to the buyer. This is the most dangerous contract type for the buyer. |
| Cost Plus Incentive Fee | CPIF | Actual costs plus profit margin for seller. | Cost overruns represent risk to the buyer. |
| Fixed-Price | FP | Agreed price for contracted product. Can include incentives for the seller | Seller assumes risk. |
| Lump-Sum |  | Agreed price for contracted product. Can include incentives for the seller. | Seller assumes risk. |
| Firm-Fixed Price | FFP | Agreed price for contracted product. | Seller assumes risk. |
| Fixed Price Incentive Fee | FPIF | Agreed price for contracted product. Can includes incentives for the seller | Seller assumes risk. |
| Time-and- Materials | T&M | Price assigned for the time and materials provided by the seller. | Contracts without ***not-to-exceed*** clauses can lead to cost overruns. |
| Unit-price |  | Price assigned for a measurable unit of product or time. (For example, $130 for engineer’s time on the project.) | Risk varies with the product. Time represents the biggest risk if the amount needed is not specified in the contract. |

## Objectives of Procurement Contracts

The objectives of procurement contracts are to:

* Provide the organisations with constant flow of goods and services to meet its needs.
* Ensure continuity of supply by maintaining effective relationships with existing sources and developing other sources of supply either as alternatives to meet emerging or planned needs.
* Buy efficiently and wisely, obtaining by ethical means the best value for every coin spent.
* Manage inventory so as to give the best possible service to users at lowest cost.
* Maintain sound co-operative relationship with other departments, providing information and advice as necessary to ensure the effective relationship of the organisation.
* Develop staff, policies, procedures and organisation to ensure the achievement of set objectives.
* Help generate the effective development of new products.
* Protect the company’s cost structure
* Maintain the correct quality/value balance.
* Monitor supply market trends
* Negotiate effectively in order to work with suppliers who will seek mutual benefit through economically superior performance.

## Contract Administration Problems

There are many administration problems associated with procurement contracts. Typical ones are summarised in Table 5.

Table 5: Typical Contract Administration Problems

|  |  |
| --- | --- |
| **Contractual Risk and Contract Administration Problem** | **Examples** |
| Proposal risk: Unclear scope of work | Ambiguous specifications lead to disputes over required performance, acceptance. |
| Surety and Liability risk: Increased cost | Inadequate bonds and insurance to cover vendor failure.(A bond is a fixed income investment in which an investor loans money to an entity) |
| Schedule risk: Wrong product | Purchase order or contract clearly identifies correct product, but vendour ships incorrect. No dispute involved. |
| Schedule risk: Delay | Purchase order has clearly stated completion date. Completion date delayed (any length of time) due to agency or vendour (with or without cause). |
| Contractual risk: Change order | Change in the scope of work (additional work, money, time), after contract award. Can be requested by either party for any reason. |
| Contractual risk: Dispute resolution and personality conflict | Personality conflicts between agency project manager or staff and vendour project manager or employees. Disagreement between the parties that cannot be easily resolved. May involve scope of work, materials supplied, payment schedules, or any other aspect of the contract. |
| Performance risk: Definition of acceptance | Completion of project is delayed due to non-acceptance of final product. Example: difference in either party’s definition of what was supposed to be delivered or provided. |
| Performance risk: Poor performance | Contract clearly states a level of expected performance (this is not in dispute) and quality problems with vendour’s performance of work occur. |
| Performance risk: Sub Contractors | The vendour uses subcontractors not on his/her payroll to perform any or all of the work. Prior approval, for use of subcontractors, was received. |

Table 5: Typical Contract Administration Problems (continued)

|  |  |
| --- | --- |
| Performance risk: Other sources | There are very few vendours that can perform the work. |
| Performance risk: Risk of failure | The project has a high risk of failure. i.e. new technology, new equipment, new vendour, project never been done before. Tight time-line or budget. |
| Price Risk: Cost | Project has a high cost. |

## Selecting Procurement Contract Types

### General Information

A wide selection of contract types is available to the contracting agencies and contractors in order to provide needed flexibility in acquiring the large variety and volume of supplies and services required by organisations. Contract types vary according to:

1. degree and timing of the responsibility assumed by the contractor for the costs of performance, and
2. the amount and nature of the profit incentive offered to the contractor for achieving or exceeding specified standards or goals.

The contract types are grouped into two broad categories: ***fixed-price*** contracts and ***cost-reimburse- ment*** contracts. The specific contract types range from **firm-fixed-price** (or **cost-plus**) contracts to **cost-plus-fixed-fee** (or **lump sum** or **turnkey**) contracts.

In the **firm-fixed-price** contract type, the company's profit, rather than price, is fixed and the company's responsibility, except for its own negligence, is minimal. The contractor has full responsi- bility for the performance costs and resulting profits (or losses).

In the **cost-plus-fixed-fee** type, the company has assumed full responsibility, in the form of profit or losses, for timely performance and for all costs under or over the fixed contract price. The contractor has minimal responsibility for the performance costs and the negotiated fee (profit) is fixed.

In between are the various incentive contracts (such as the guaranteed maximum, incentive types of contracts, and the bonus-penalty type of contract) in which the contractor’ responsibility for the performance costs and profit or fee incentives offered are tailored to the uncertainties involved in contract performance.

These contracts provide for varying degrees of cost responsibility and profit depending on the level of performance. Contracts that cover the furnishing of consulting services are generally on a per diem basis at one end of the range and on a fixed-price basis at the other end of the range.

### Negotiating a Contract Type

Selecting the contract type is generally a matter of negotiation and requires the exercise of sound judgment. Negotiating the contract type and negotiating prices are closely related and should be considered together. The objective is to negotiate a contract type and price (or estimated cost and fee) that will result in reasonable contractor risk and provide the contractor with the greatest incentive for efficient and economical performance.

A firm-fixed-price contract, which best utilises the basic profit motive of business enterprise, is normally used when the risk involved is minimal or can be predicted with an acceptable degree of certainty. However, when a reasonable basis for firm pricing does not exist, other contract types

should be considered, and negotiations should be directed toward selecting a contract type (or combination of types) that will appropriately tie profit to contractor performance.

In the course of an acquisition program, a series of contracts, or a single long-term contract, changing circumstances may make a different contract type appropriate in later periods than that used at the outset. In particular, contracting officers should avoid protracted use of a cost-reimbursement or time- and-materials contract after experience provides a basis for firmer pricing.

Each contract file should include documentation to show why the particular contract type was selected. Exceptions to this requirement are:

1. acquisitions made under simplified acquisition procedures unless otherwise required under agency procedures,
2. contracts on a firm fixed-price basis other than those for major systems or research and develop- ment, and
3. awards on the set-aside portion of sealed bid partial set-asides for small business.

### Factors for Selecting Procurement Contract Types

There are many factors that the contracting agency should consider in selecting and negotiating the contract type. They include the following:

1. **Price competition**. Normally, effective price competition results in realistic pricing, and a fixed- price contract is ordinarily in the contracting agency’s interest.
2. **Price analysis**. Price analysis, with or without competition, may provide a basis for selecting the contract type. The degree to which price analysis can provide a realistic pricing standard should be carefully considered.
3. **Cost analysis**. In the absence of effective price competition and if price analysis is not sufficient, the cost estimates of the contractor and the contracting agency provide the bases for negotiating contract pricing arrangements. It is essential that the uncertainties involved in performance and their possible impact upon costs be identified and evaluated, so that a contract type that places a reasonable degree of cost responsibility on the contractor can be negotiated.
4. **Type and complexity of the requirement**. Complex requirements usually result in greater risk assumption by the contracting agency. This is especially true for complex research and develop- ment contracts, when there are performance uncertainties is a likelihood of changes in the contract which makes it difficult to estimate performance costs in advance. As a requirement as quantity production begins, the cost risk should shift to the contractor, and a fixed-price contract should be considered.
5. **Urgency of the requirement**. If urgency is a primary factor, the contracting agency may choose to assume a greater proportion of the risk or it may offer incentive to ensure timely contract performance.
6. **Period of performance or length of production run**. In times of economic uncertainty, contracts extending over a relatively long period may require economic price adjustment terms.

### Contractor’s technical capability and financial responsibility.

1. **Adequacy of the contractor’s accounting system**. Before agreeing on a contract type other than firm-fixed-price, the contracting agency shall ensure that the contractor’s accounting system will permit timely development of all necessary cost data in the form required by the proposed contract type. This factor may be critical when the contract type requires price revision while performance is in progress, or when a cost-reimbursement contract is being considered and all current or past experience with the contractor has been on a fixed-price basis.
2. **Concurrent contracts**. If performance under the proposed contract involves concurrent operations under other contracts, the impact of those contracts, including their pricing arrange- ment, should be considered.
3. **Extent and nature of proposed subcontracting**. If the contractor proposes extensive subcontracting, a contract type reflecting the actual risks to the prime contractor should be selected.

### Policies

1. Contracts resulting from sealed bidding are normally firm-fixed-price contracts or fixed-price contracts with economic price adjustment.
2. Contracts negotiated may be of any type or combination of types that will promote the contracting agency’s interest.
3. The cost-plus-a-percentage-of-cost system of contracting is not normally be used. Prime contracts (including letter contracts) other than firm-fixed-price contracts normally, by an appropriate clause, prohibit cost-plus-a-percentage-of-cost subcontracts.

## Procurement Contracts and the Role of the Procurement Department

The management of procurement contracts should be mainly under the responsibility of the procure- ment department. In order to understand the necessary activities in procurement Contract Manage- ment it is important to have a look at the **trends and topics within this department**:

* **Cost reduction:** The procurement department is one of the most important departments for cost savings in an enterprise. If the department can negotiate better prices this will have an impact on costs within the entire enterprise. To make sure the procurement can best save money it is necessary that the department knows about all procurement contracts in the enterprise and they must also approve every procurement contract or purchase order.
* **Reduction of suppliers:** Procurement departments aim to reduce the number of suppliers for their enterprises. This will allow the department to achieve cost reductions by ordering high volumes from one supplier and high quality deliverables by cooperation with well-known suppliers. On the other hand, a reduced number of suppliers also implies a higher dependency on few suppliers.
* **Renegotiation of contracts:** In times of the financial crisis renegotiation of contracts is a very important task of the procurement. The basis for a renegotiation of contracts is having an overview over all existing contracts and the terms and conditions of these contracts. Renegotiation can lead to enormous savings and can help an enterprise to survive in financially hard times.
* **Procurement as partner/central coordination:** The procurement department is increasingly seen as a business partner for all other departments and other departments accept the central coordination role that the department holds. This also supports the central role of the procure- ment departments in managing procurement contracts.