After you have obtained all of the information you need about the resources that are required for the project, and ensured they meet sustainable specifications, the next stage of resource acquisition begins. This is the development of an acquisition plan. The acquisition plan will contain the information you need in order to plan, organise, deliver and manage the resources for the project.

This topic guide will cover:
- starting the acquisition plan
- factors to consider for resource procurement and acquisition
- supplier information and data
- completing the acquisition plan.
1 Starting the acquisition plan

The acquisition plan should contain all the major resources you need for the project. In order to create the plan you first need to process the data you gathered in Topic guide 5.1.

For each resource in the plan, you will need to include:
- suppliers’ details, including a primary contact
- suppliers’ postal address
- suppliers’ email address
- a unit price and estimate price
- the required quantity
- specification requirements
- lead-in time delivery dates
- an address for delivery
- the type of contract
- warranties.

Figure 5.2.1 shows a partially completed sample acquisition plan.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Supplier no.</th>
<th>Quantity</th>
<th>Specification</th>
<th>Date required</th>
<th>Date ordered/order number</th>
<th>Estimate cost</th>
<th>Actual cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 mm Butterley facing bricks</td>
<td>0001</td>
<td>45,000</td>
<td>BS 4507: colour buff red, sand faced</td>
<td>19 October 2014</td>
<td>28 August 2014 600/12458</td>
<td>£175/1000</td>
<td>£168/1000</td>
</tr>
</tbody>
</table>

Figure 5.2.1: Extract from a sample acquisition plan.

Scheduling

Scheduling involves planning resource acquisition so that resources arrive on site in time to be included in the contract. The key element in any schedule is time. Time is the one constraint that is contractually signed for and involves liabilities should the agreed handover completion date not be met. These liabilities can put a heavy financial burden on a company’s trading position.

One of the best methods of scheduling is to use a software package that can create Gantt charts to give an indication of time constraints. Gantt charts can be used to show resources that require specific ordering dates, delivery dates and lead-in times. Within a schedule, time should run from the top to the bottom of the schedule. That way, each resource can be worked through logically.

Portfolio activity (1.3)

Develop an acquisition plan using the data you compiled in Portfolio activity (1.1) in Topic guide 5.1. This can look similar to the example shown in Figure 5.2.1. Alternatively, you could create it using documentation used in your workplace.

Note: the supplier number will be unique to each business. The topic of suppliers is covered later in this guide in some detail.
Multiple schedules

By reviewing single schedules together you may be able to achieve economies of scale and other efficiencies. By combining schedules onto one ‘master schedule’ you will be able to see if two identical materials will need to be purchased at the same time and, therefore, you can plan for a combined order.

This saves time, finance and wastage on products, travel and transport costs, and reduces the associated carbon burden on the environment. There will also be a positive impact on the local community as there will be fewer deliveries made to the site and so a reduction in associated transport noise. A route where several resources can be dropped off at different site locations also reduces individual transport journeys.

Using software to perform scheduling is essential because it can provide reports that ‘spot’ a possible resource combination. Doing this manually is much more labour intensive and there is a danger of not spotting potential resource savings.

Standardising resources

Standardising resources may not always be possible and this is primarily down to the materials’ specification from the project’s architect or designer. Specific materials, for example facing bricks, will have been selected for their specification, texture and colour, which are unique to that project. The same brick type may not appear in any other project that your company is undertaking that year. Therefore, economies of standardisation cannot be driven out from such an order.

However, there are many materials where this is not such a consideration, for example:

- internal lightweight thermal blockwork
- structural and carcassing timber
- second-fix timber softwoods
- fixings
- insulation
- concrete
- lintels.

Here, opportunities for the standardisation of materials into a ‘bulk’ order will exist when it is carefully coordinated across several projects. This will enable larger discounts to be obtained from suppliers, distributors and manufacturers.

Standardising resources within the acquisition plan may also involve:

- ordering resources from manufacturers rather than suppliers – if you require larger orders of a small number of resources it is often efficient to place these with manufacturers if you have a direct account with them, as this cuts out any sub-distribution network
- ordering resources from suppliers rather than manufacturers – this way, bulk deliveries of a range of different resources can be arranged
- coordinating ‘similar materials’; for example a bulk order for timber in a variety of different sizes and types
- the modular coordination of sizes of materials.

Link

HNC in Construction and the Built Environment: Unit 15 Production management for construction, learning outcome 4, assessment criteria 4.3 and 4.4.
Delivery dates

As part of the initial acquisition plan you will need to investigate any construction project resources that have long lead-in times, i.e. a product, material or service that is manufactured to order and is not held in stock (and as such will take longer to obtain). Items such as curtain wall cladding systems can take six to nine months to be manufactured for a project.

Within your initial preparation for the acquisition plan, you will need to:
• examine the contract specification or bill of quantities and investigate which suppliers have long lead-in times
• contact each supplier of specialist items by phone or email
• ascertain the delivery dates from receipt of orders
• advise the client if these dates cannot meet the contract-agreed programme before the start of the construction works
• seek alternative specified resources, as necessary
• agree these alternative resources with the client
• confirm instructions in writing.

Lead-in times (LITs)

Excessive lead-in times (LITs) for a project can have a detrimental effect on progress if resources do not arrive in sufficient time for unpacking, examination and installation into the project by craft operatives. Therefore, it is essential that you analyse all of the resources that are specialist well in advance of the required delivery time on site. Excessive LIT issues can be accommodated by:
• holding discussions with a client/designer or architect about possibly using alternative resources that still meet the specification for the project
• raising resource issues at the pre-contract meeting with all parties
• referring the delivery date(s) back to the architect/designer for instruction, ensuring that, once the letter of intent or contract has been issued, you have contacted the supplier to confirm the lead-in time and the fact that it will not meet the agreed contract programme
• negotiations with the supplier
• negotiations with the resource manufacturer.

All of these factors may have some influence in reducing the LIT to a more acceptable level that meets production requirements on site.

Phased deliveries

By placing a bulk order with a resource supplier, you can obtain a greater discount than with a single, smaller order. Similarly, having a direct account with a manufacturer will provide an annual discount to the business on orders received for that year.

Once a bulk order is placed it can be called off from the supplier in smaller deliveries, with the supplier either holding the main bulk order in stock or having negotiated call-offs with the manufacturer. Calling off stock from a supplier becomes very important when the footprint of the building is tight to the boundary of the site and there is very little room for storage. Theft of valuable materials may present resource issues.

Key term
Called off – when a bulk order is placed with a supplier and smaller quantities of the large order are sent for delivery to a site.
Calling off from a bulk order to individual sites will need careful management to ensure that the supplier has a list of delivery dates for each site and the quantity requirements for each one.

This could be controlled using the following simple adaptation of the acquisition plan in Figure 5.2.1. In Figure 5.2.2, thermalite concrete blocks have been collated, with a total quantity of 86,000 m$^2$. The individual sites’ quantity requirements have been written on the acquisition plan. This information will need to be transferred over to the order that is sent to the supplier, along with the delivery addresses for sites 1, 2 and 3 and the required delivery dates.

<table>
<thead>
<tr>
<th>Acquisition plan no.:</th>
<th>Scheduler’s name:</th>
<th>Date prepared:</th>
<th>Resource</th>
<th>Specification</th>
<th>Supplier no.</th>
<th>Quantity</th>
<th>Date required</th>
<th>Date ordered</th>
<th>Estimate cost</th>
<th>Actual cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>100 mm lightweight thermalite concrete blocks</td>
<td>3.5 N/mm$^2$</td>
<td>0967</td>
<td>Total – 86,000 m$^2$</td>
<td>19 June 2014</td>
<td>28 May 2014</td>
<td>£6.50/m$^2$</td>
<td>£6.25/m$^2$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Site 1 – 47,000 m$^2$</td>
<td></td>
<td></td>
<td></td>
<td>15 August 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Site 2 – 18,000 m$^2$</td>
<td></td>
<td></td>
<td></td>
<td>19 Sept 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Site 3 – 21,000 m$^2$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Economies of scale**

Economies of scale are only possible when individual orders are combined into larger orders. Doing this gives the materials’ buyer scope to negotiate a greater discount with a supplier or manufacturer. Discounts can be delivered in a number of ways, including:

- one-off discounts on single orders
- an annual discount (dependent on a target level of trade with a supplier or manufacturer)
- discounts for using full loads of resources, thus saving on part load charges.

The basic rule is always that the greater the quantity you can order, the larger the discount that a supplier or manufacturer can offer as a reward for loyalty and as confirmation of your order.

**Placing a supplier order**

Each company will use a supplier’s acquisition order that raises a purchase agreement with the supplier. Basic purchase orders contain a number of different features, including:

- your contact details
- the supplier’s contact details
- the resource quantity
- the agreed price
- a purchase order number
- a delivery date
- where the delivery is to be made
- an authorised signature and date.
Care must be taken when creating purchase orders. If several orders have been combined, then each site’s delivery address needs to be clearly shown on the purchase order. Figure 5.2.3 shows a basic template for a purchase order that can provide a starting point for an organisation’s requisitioning of resources.

![Purchase Order Template](image-url)

**Figure 5.2.3:** A typical purchase order.
Unit 5: Monitoring supplies of resources to meet project sustainability requirements in construction and the built environment

5.2: Developing the resource acquisition plan

Portfolio activity (1.4, 2.4)
On a contract you are currently working on, obtain copies of three recent purchase orders for primary resources. Evaluate the purchase orders against the contract programme to check that they meet the requirements of the acquisition plan. Critically, was the delivery date met? If not, could anything be done to improve the resource procurement process?

Case study: The wrong delivery
John was the materials’ requisition manager for a medium-sized construction company. He placed an order for 20,000 m² of concrete blocks for three construction sites to be delivered direct from the manufacturer. John rang the manufacturer and ascertained that eight weeks from receipt of order was required for manufacture and delivery to site. The order was emailed to the manufacturer ten weeks before the blocks were needed on the three sites and a delivery date was agreed for each site.
A few weeks later, the site manager rang John to complain that 20,000 m² of concrete blocks had turned up at site 1 and they had nowhere to store them.
Consider the following questions.
1 What went wrong in this scenario?
2 What documentation would John have in place to prove that this was the manufacturer’s mistake?
3 How could John resolve the problem?

ISO 9000
ISO 9000 standards cover aspects of quality management. If your company or organisation has accreditation with ISO 9000, then part of the standards rely on the processes and procedures in a company’s procedures manual being followed. Within the manual will be procedures and processes that have to be followed, documented and maintained in relation to the acquisition of resources. These aspects must be carefully considered and followed in order to protect the ISO registration and certification.

2 Factors to consider for resource procurement and acquisition

There are a number of factors that you should consider when you procure resources. We will look at each of them in turn.

Price
The price of a resource that was used at the tender stage of procurement needs to be met or beaten when the resource is actually ordered. Prices obtained at the tender stage are often only fixed by a supplier for 30 days. You will need to state this within the tender documentation to avoid a situation where you cannot pass on any price increases to a client (potentially leading to a negative project budget). This will of course depend on the type of contract that you are operating under, for example it may be cost plus, fixed price or design and build.
Some suppliers of specialist resources may require payment prior to delivery to site. This is often requested for large one-off orders.
Prices quoted are often subjected to:

- value added tax (VAT) at the appropriate rate
- a 2.5 per cent MCD (main contractors discount) for continued loyalty to the supplier and for prompt payment
- a scaling of discounts depending on the quantities purchased
- a delivery charge for transportation to site and collection – especially if it is a plant resource
- packaging-related charges – for example, wooden pallets are often charged for during delivery and credited when collected
- charges relating to attendances at the point of delivery – for example, crane offloading is often charged as an extra to the unit price of the resource.

Always ensure that you have explicitly agreed terms that are transparent between you and the resource supplier, and that these are written down and attached to the order.

**Payment terms**

These are the terms that you have agreed with a supplier in relation to when you will pay them. Normal terms of payment are 30 days from receipt of invoice. Invoices are usually processed at the end of the month.

However, in certain situations, payment terms can be 60 or 90 days depending on the contractual agreement between the main contractor and a client. These terms need to be expressly agreed with the supplier as they may reflect a slightly higher unit price for the delay in payment.

**Quantity**

The key element with any resource acquisition is how much of the resource you need. This can be ascertained from several different sources that we have already examined along with new ones, including:

- the bill of quantities – provided by the client’s quantity surveyor (but these should be checked for accuracy)
- the contract drawings – you will need to ‘take off’ the quantities that are required for each resource using standard notation
- a physical measure on site to confirm the accurate quantities that are required, for example by taking ground levels to establish quantities of earthworks and fill materials.

Another consideration is the percentage that needs to be added to the order for wastage of the product in its installation and cutting of a material down to size. Waste percentages vary between resources but a normal amount to add is 2.5 per cent per order to cover damage, breakages, cutting and installation. The more modular the resource (which reduces the need to ‘cut to fit’), the more the value added for wastage can be lowered.

**Quality**

Quality is often defined by the architect or designer through a number of different standards, including:

- a British Standard (BS) number, which specifies the manufacturing standard for a product
5.2: Developing the resource acquisition plan

- a European Number (EN), which is a European-recognised standard that has to be displayed on all products
- a manufacturer’s standard
- an Agrément Certificate registration standard, issued by, for example, the British Board of Agrément (BBA).

The quality of work is often a tested feature, with a sample built to an agreed standard that is approved then retained to ensure that other installations match this standard.

Availability

When you make an initial enquiry with a supplier, you will be able to discuss the availability of the product, material, resource or service that you require for your contract. At this point you will be advised of the resource availability, stock levels, manufacturing periods, etc. This information will then enable you to make an informed decision should problems occur with the availability of a product.

Solutions to the lack of availability of a resource could be to:
- ask the designer to specify an alternative acceptable resource
- negotiate phased deliveries from the supplier
- seek stock from alternative suppliers.

Availability is often a major issue. If resources are not available you must bring this to the client’s attention early on in a contract so alternative solutions can be found.

Life expectancy

Life cycle costing should form an important part of a resource’s acquisition. Figure 5.2.4 illustrates the stages of a resource’s life, which all include associated costs and carbon emissions. The initial purchase price of a resource should, therefore, not be the first consideration you make when choosing it because in the long term the maintenance cost of the resource may severely outweigh the initial price. A resource with a cheaper initial capital cost may prove expensive to maintain over several years.

**Figure 5.2.4: The life cycle of a resource.**

**Key term**

Agrément Certificate – a certificate of a product’s performance issued for manufacturers and installers supplying the construction industry.

**Link**

HNC in Construction and the Built Environment: Unit 1 Design principles and application for construction and the built environment, learning outcome 1, assessment criterion 1.2.
Unit 5: Monitoring supplies of resources to meet project sustainability requirements in construction and the built environment

5.2: Developing the resource acquisition plan

### Maintenance and servicing

The position of a resource within a building will have an effect on how it is maintained and serviced. If a resource is placed at height, health and safety precautions must be taken, not only for employees undertaking any servicing but also members of the public. Components should be designed with maintenance and servicing in mind. Connections that just plug together are quicker to maintain. Access and egress to the resource that requires maintaining must also be considered, with sufficient working space made available for this to happen.

The maintenance team can have an important role to play in the design and acquisition of future resources. They will have first-hand experience of the resource's life cycle costing and will be able to inform the design team about considerations that may not be envisaged initially, providing valuable feedback for future specifications.

#### Portfolio activity (2.1)

Looking at a project you are currently working on or another recent project in your company, talk to the maintenance team to gain feedback on the resources used and their supply requirements. You can also talk to the end users of a completed project about resources that have been installed in a building – ask them if there were any unforeseen issues that arose during the installation and make notes of their feedback.

### Supplier support

If a supplier has a technical support team there is ‘added value’ in using their products, services or resources. A support team can provide:

- specialist advice and guidance for product use
- installation guides
- design information
- approved applicators who are under licence for their products
- an after-sales team
- solutions to installation problems
- specifications for different locations and applications
- CPD (continuing professional development) and training packages.

Normally, a technical sales representative can visit your offices or site and give information, advice and guidance relating to the supplied resource.

### Storage and handling

Resources are delivered in many formats, namely:

- within 25 kg sacks
- loose, in bulk
- in silos
- palletised and shrink-wrapped
- within cardboard boxes
- in timber or steel cradles
- banded and wrapped
- in assembled components
- prefabricated into volumetric elements.

**Key term**

**Volumetric** – the manufacture of building components into length, width and height to form a volume.
Correct storage and handling of resources reduces damage and wastage, thus enabling maximum use to be made of the product.

**Sustainability**

When planning resource acquisition and procurement, one of the most important things to think about is the sustainability of a resource. Every aspect of a resource’s embodied and embedded energy should be carefully considered. Table 5.2.1 gives you an understanding of the sustainability implications of obtaining a resource.

<table>
<thead>
<tr>
<th>Sustainable factor</th>
<th>Resource acquisition example</th>
<th>Why the resource is sustainable</th>
</tr>
</thead>
</table>
| Energy use and carbon minimisation (including sourcing and transportation) | - Source a material that is manufactured locally and transported using small load vehicles.  
- This means less energy is used to source the product and have it delivered to site. | - Sourcing ‘locally’  
- Specifying renewable products  
- Specifying ‘green’ products |
| Impact on occupiers and near neighbours | - Use larger loaded wagons with trailers.  
- This reduces the number of transports that have to be made to site, reducing the impact on the surrounding built environment. | - Bulk orders delivered in one visit to site  
- Procurement through merchants ensuring full loads are delivered to site |
| Environmental issues | - Use technologies and resources that have renewable features, and products that can be recycled after the end of their lives.  
- This reduces the impact on the planet. | - Sourcing ‘green’ assured materials  
- Using certified products  
- Using sustainable sources |
| Transportation | - Reducing transportation has a marked effect on the production of harmful gases from vehicle exhausts and noise pollution. | - Reduced number of deliveries through the use of full loads and bulk orders |
| Elimination of waste | - Order products in modular formats that do not require cutting to reduce wastage.  
- Use a low cost product to avoid cutting more expensive ones, for example common bricks versus thermalite blocks as packers. | - Purchasing resources already cut to size  
- Specifying resources whose wastage can be returned to the manufacturer, for example plasterboard |
| Prefabricated components (e.g. volumetric pods, panelised hybrid timber framed systems) | - Order resources that have been assembled into the biggest module that can be considered.  
- This reduces wastage, and saves time and resources during production and assembly on site. | - Specifying through negotiation the maximum size of components that can be prefabricated to order |
| Recycling and reuse of materials | - Procure materials that have a higher percentage of recycled products within them.  
- This saves energy in the manufacturing processes and reduces the carbon footprint of the resource. | - Procuring resources that are manufactured from recycled products  
- Specifying resources that can be recycled after useful life |

**Health and safety issues**

A number of regulations cover the resources that will be used in a project. The regulations that are relevant to materials and plant resources for construction include:

- The Health and Safety at Work Act, 1974
- The Control of Substances Hazardous to Health Regulations, 2007 – covers many aspects of resource handling and use; requires all products to provide data handling sheets with explicit risk assessment details
5.2: Developing the resource acquisition plan

- The Provision and Use of Work Equipment Regulations, 1998

All of these regulations contain sections that cover an assessment of risk associated with a resource and how risk can be controlled so it is at a level that should not cause harm to anyone who comes into contact with it. You should always make operatives aware of any literature or associated safety documentation that comes with a resource so they can read all safety instructions related to that resource.

**Deterioration and damage**

This consideration is very important for ‘high value’ resources that can, if damaged, have a marked effect on a construction programme. A high value resource should always be suitably packaged. For example, an escalator will arrive to site in a secure framework that protects it during transport. Often, resources are crated for transport as the cost of packaging is far outweighed by the value of the resource. However, packaging should always be confirmed with the supplier.

As part of a purchase contract, goods and services have to be signed for and examined to make sure they are free from defects or damage before they are accepted, invoiced and remunerated.

**Off-site manufacture, on-site assembly**

**Prefabrication** can have several benefits for resource acquisition onsite, namely the ability to reduce:

- resources required for the installation of the component
- the level of skilled labour required
- on-site wastage
- transport journeys
- carbon emissions
- the impact for neighbours
- noise levels on site.

However, prefabrication does have certain disadvantages – often, cranes have to be brought on site to safely lift the prefabricated components into place.

**Raw materials and manufactured materials**

The sustainable sourcing of raw materials for the manufacture of other materials must be considered at the acquisition stage. You have the ability to influence the decision about who to purchase a resource from. A company’s ‘green’ credentials may have an effect on this decision. Always undertake research into a product or resource to establish what impact its manufacture and use will have on the environment.

BS EN 15804 is a new regulatory standard. It was developed by European Standards committee, CEN/TC 350, and it gives a certification standard to construction resources for adhering to certain environmental rules.
People

People have a marked effect on the acquisition of resources. Sales representatives in supplier businesses can build relationships with construction companies that provide:
- a dedicated service over a long period of time
- personal one-to-one visits to negotiate orders
- a primary point of contact for the acquisition of several resources
- scope for annual discounts.

Suppliers want your business and so a dedicated key account manager to work with construction companies is an asset to any resource supplier. Having a primary point of contact with a resource supplier is a strong asset for a construction procurement manager as it means issues can be sorted out quickly and acquisition problems resolved.

Construction plant and equipment

So far we have looked mainly at the acquisition of materials-based resources. There is, of course, another construction market: plant and equipment. This market includes:
- lifting equipment – mobile elevated platforms, cranes and cherry pickers
- small hand tools and powered equipment
- generators and air compressors
- equipment for movement of materials – e.g. forklift trucks and rough terrain handlers
- hoists and goods lifts.

This is just a short list of the range of equipment that is available.

Construction plant and equipment have a slightly different method of acquisition compared to materials-based resources. There are two modes of acquisition.
- Plant and equipment can be purchased and maintained by the company.
- They can be hired from specialist construction plant suppliers for a daily fee plus cost of delivery.

Figure 5.2.5: This excavator loader could be purchased outright by a construction company or could be hired on a daily basis.
When placing an acquisition order for plant you will need to give a supplier specific site-based information and data. This information may include:
- the height to which resources will need to be lifted
- the reach distance from a static point
- the capacity in weight that needs to be transported
- the requirement for exhaust filters to reduce airborne pollution
- the distance to be moved
- the type of materials that the equipment will be used on
- the cutting depths
- the safety voltage (110 V)
- the duration it will be used on site
- whether there are trained operators on site.

The best approach is often to ask a technical sales representative from the plant supplier to visit the project and supply the most efficient type of plant for the required operation.

3 Supplier information and data

Suppliers are a valuable resource for the acquisition manager or buyer within a large construction organisation. They are a vital part of the project as they supply the resources that are needed to provide a client with a project that is on time, within budget and to an acceptable quality. It is helpful to maintain a large database of suppliers’ information that can be called on when needed. The database might contain records for individual suppliers like the one shown in Figure 5.2.6.

<table>
<thead>
<tr>
<th>Supplier: Topliss &amp; Son Ltd</th>
<th>Ref. number: 012589</th>
<th>Rating: 5*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address: 36 Craigs Street London WC1 7TE</td>
<td>Phone Number: 0207 7946 0346</td>
<td></td>
</tr>
<tr>
<td>Products: Specialist brick manufacturer providing a range of cut and bonded special-shaped bricks to order</td>
<td>Key sales contact: Name: Keith Sydell</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phone: 0207 7946 0346</td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:sydellk@ts.co.uk">sydellk@ts.co.uk</a></td>
<td>Payment terms: 30 days</td>
<td></td>
</tr>
<tr>
<td>Additional comments: Excellent-rated supplier</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Payment terms are important for a supplier and a main contractor, and they can help to ease cash flow during the construction process. Payment terms should be agreed with the supplier.

Rating a supplier will provide valuable feedback for the whole construction team. A team who has used a good supplier in the past might recommend them over another supplier in terms of performance for future projects.
Sub-contractors

A large part of many projects is provided by sub-contractors. Sub-contractors can be considered as resources that service a construction project. The acquisition process for sub-contractors is similar to that for other resources, although there are different purchase order terms, such as a contract with terms and conditions. In some cases, the purchase order may be replaced by a domestic sub-contract on a more formal basis. This is linked to the main contract between the main contractor and the client.

Sub-contractors’ details can be recorded in a template like the one shown in Figure 5.2.6.

Nominated and named suppliers and sub-contractors

Nominated and named suppliers are specified by the client prior to the tendering process with a main contractor. They are suppliers with whom the client has entered into negotiations prior to the commencement of work. For example, this could be a supplier of a specialist marble floor finish that has to be ordered, cut and polished in Italy, then shipped over to the UK for installation.

Contracts with nominated and named sub-contractors may also have been negotiated and placed for specialist services. For example, the design of a boiler management system for a 200-storey building requires the knowledge and understanding of a specialist contractor who will install such a system.

Supplier information and data template

If your organisation does not hold a supplier database, then this is an ideal starting point for you to begin collecting suppliers’ and sub-contractors’ data that can be used for acquisition and procurement planning for contracts.

Portfolio activity (2.3)

Carry out an analysis of one supplier you frequently use at work. Establish how initial contact is made with the supplier, how specifications for the contract are communicated, how accurate quantities are defined and how an order is placed.

Prepare a flow chart to track this process.

4 Completing the acquisition plan

Manual or electronic systems

Your organisation’s acquisition systems may be electronic or manual. There are many advantages to linking an acquisition system to a planning system electronically, to help control the time spent on a contract. (The resource acquisition software is often built into the planning software.) For example:

• the system prompts and reports on ordering, showing any gaps that exist
• lead-in delivery times can be entered into a system
• the system can include the financial control of resources
• an acquisition programme can be produced.
The benefits of an electronic system outweigh a manual paper-based system. However, smaller projects will often operate and run on manual systems due to their size and this works just as well as an electronic system that might be used for larger projects.

The acquisition plan template you saw an extract from in Figure 5.2.1 is just one method of creating an acquisition plan. Several of these sheets will build up for each project. They can be controlled using a highlighter marker system to monitor, track and progress the plan. As each order is placed it should be swiped with a colour – any gaps will show that no orders have been placed and that they need to be actioned.

Orders

Orders need to be placed in sufficient time to make sure they meet the delivery requirements of the main contract programme. They also need to be within the budget or estimate limits defined within the agreed contract price. Once an order is placed, a copy should be sent to the site so they are fully aware of the delivery from the supplier. Orders should be confirmed to make sure the supplier has received the written purchase order and that it has not been lost in transmission. An order acknowledgement is a sound reporting procedure to employ within an acquisition plan and confirms that the supplier has understood your instructions.

Feedback

It is essential to provide the procurement and acquisition team with valuable on-site feedback about a product or service that has been used within a project. This will inform its future use or the use of a particular supplier. Within an ISO-registered organisation, feedback has to be undertaken to maintain an acceptable standard of suppliers and sub-contractors who work for the company. Feedback provides:

- a transparent process to evaluate a supplier, sub-contractor or resource
- improved efficiency by advising the resource supplier how they rate against competitors – this should improve effectiveness for a main contractor or client
- information for everyone about what could be done better next time to improve installation onsite
- information about the products or resources that did not work well and which should not be considered for any future projects.

Portfolio activity (3.5, 4.5)

Chair a meeting with a supplier for a contract you are currently working on. Prepare an appropriate agenda and undertake negotiations on one activity in the project, formulating an agreement between the two parties. Reflect on this meeting by producing a log detailing what went well and contrasting this with what did not go so well.

Note: another way of producing evidence could be to video or record the meeting. Make sure you have the supplier’s permission to do this. Alternatively, you could canvass the supplier’s opinion by developing a feedback questionnaire in which they give you their opinion of your management of the relationship with them.
Checklist

At the end of this topic guide you should be familiar with:

✓ the scheduling of resource acquisition
✓ developing an acquisition plan and what it contains
✓ placing an order with a supplier to meet the acquisition plan timelines.

Further reading and resources


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