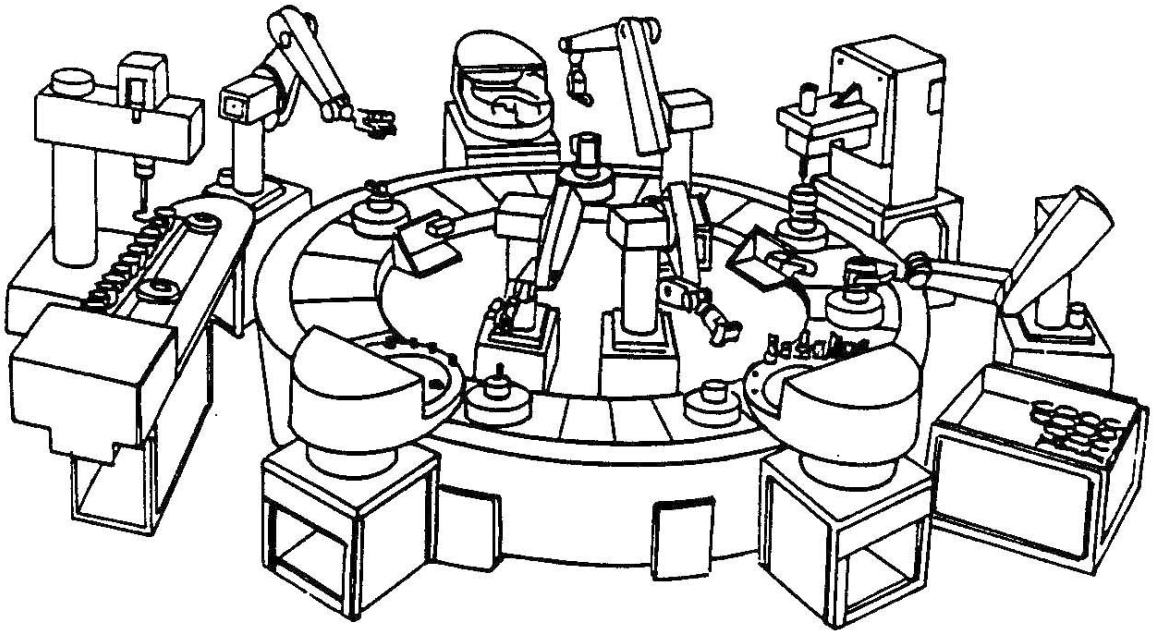
LLC Law

Automated Systems Procurement White Paper



Project Planning Guide for Logistics & MHE Procurement Managers

Automated Systems Procurement

Overview

The purchase of an automated or semi automated materials handling system will be one of, if not the, most critical decisions you and your business will make. This is because the new system's operation should be a pivotal driver for the whole organisation and its logistics function, leading to competitive advantage, reduced cost and improved efficiency.

Not only will the profile and expectations for the project be high, but so will the investment profile, both in terms of real and opportunity costs. The project will make great demands on the team, from management's strategic planning, to planning consent and building regulation compliance, laying of concrete slab, shed build, system installation and fit out, preparation of the building's lighting heating and electrical services for the new system, to final acceptance testing, sign-off and performance testing. Cradle to grave, some 18-24 months may pass. And there's no going back. For each project, there will only be one chance to implement it efficiently and to plan. So, for the logistics and procurement team, the risks are high.

Alongside such project complexity, you will need to anticipate, design and build in those future structural changes that you expect within your market. This will enable you to capture the next generation of best practices that will need to be applied within the new facility. Where these are uncertain, the system must have built-in operational flexibility, so that modifications can be implemented down-stream with the minimum of cost and down-time.

The logistics team will need to ensure that the new system works efficiently and consistently on Day 1. To guarantee this, nothing can be left to chance. The required operational and performance levels must be understood, clarified and the relevant KPIs built into the design and configuration of the system. And in order to properly manage cost, this will involve detailed consideration of each and every alternative option for the key mechanical components of the system - from receipt to despatch. The logistics team must verify the system's manufacturer sources and their historic fault and reliability levels, geographic location and associated replacement lead times and spares costs, together with complexity levels, related training, servicing requirements and life expectancy of the module options.

The design and planning process must include consideration of your end-customers and their requirements in relation to the way product is sourced, flows through and is despatched from the new facility, including returns. Current and future return and rectification levels, postponed customisation requirements, destruction, rectification and recycling arrangements must all be addressed. In order to maximise returns and efficiency, there may be opportunity to implement changes to the upstream procurement arrangements with suppliers, and the effect of such improvements built into the system.

The transition to the new facility will need to be phased, with an effective physical start-up, training, testing and adjustment period and process. And should there be a problem, then an appropriate contingency plan must be in place, allowing fall-back to a combination of old or alternative facilities so as to minimise any adverse impact and safeguard the business.

In the absence of remedies, delays can quickly diminish the cost savings and efficiencies built into your investment assumptions and operational plan. If the project fails to deliver financially in Year 1, then the P&L for that year could be adversely affected. But if it fails to operate longer term, the consequences could be disastrous for the organisation and its market position.

Before the new system is up-and-running, arrangements need to be put in place to manage and maintain it. This may be in-house where the required expertise is available, or contracted out to the system supplier or another supplier. Either way, service levels, KPIs and spare parts management budgets need to be understood and prepared.

LLC Law has specialist expertise and experience of major projects in the field of automated and semi-automated systems procurement and we leave nothing to chance. This overview is designed to give you an indication of the issues to be taken into consideration when planning and managing the process and to flag key considerations to potential buyers of such systems.

Key Practical Considerations

1. The Team

The buyer will need to appoint an internal team to manage the process, comprising at the very least a project manager with overall responsibility for the project, a project engineer to deal with technical issues, a logistics manager, a contract manager to take on primary responsibility for negotiations, a finance officer, an IT manager and an HR manager.

Usually an experienced external team will also be appointed comprising at least a system consultant, who can also act as the "Engineer" under the contract if desired (though not to be confused with the project engineer), and lawyers with experience of such specialist engineering legal contracts.

2. Objectives

The project team should develop an overall plan which, as well as dealing with the acquisition of the new system itself, takes into account funding, land purchase, planning consent, building regulation compliance, through to reorganisation of supply arrangements, renegotiation of outsourcing contracts, operation of the new system and ongoing maintenance and supply of parts. The effects of each element of the plan will also need to be taken into consideration – if operations and maintenance are to be kept in-house, retraining and relocation of employees maybe necessary, as might the possibility of changing working practices, in conjunction with discussions with unions, if necessary. Redundancies and associated costs and consultation must be addressed. If these functions are to be outsourced, then TUPE issues must be understood.

Consideration should also be given to the degree to which the buyer will take responsibility for managing and partnering the various elements of the project itself, and the degree to which they will be outsourced. Generally, the more responsibility that the buyer takes, the lower will be the cost of the project, but the less recourse there will be against the suppliers. Conversely, a one-stop turnkey contract will be likely to be more expensive, but will force a greater degree of accountability onto the supplier if anything goes wrong. Buyers should note with caution the consequences for complex system procurement when responsibility vis-à-vis supply partners is not properly delegated and the misunderstanding this can cause.

3. Tendering

The buying team should ensure that its invitation to tender (or invitations, if it is proposed that different elements are sought from different sources) matches the overall plan devised and, in particular, includes an comprehensive list of all the functional requirements of the required solution (e.g. operational performance, manpower levels, retraining, future maintenance) which each bidder is being asked to supply.

The invitations to tender should also include details of the operating levels which are required to be achieved. In respect of the core system itself, for example, this could include detailed KPIs covering the key elements of availability, reliability, accuracy, speed, capacity, operating cost, power consumption, pollution and noise control. Ideally these KPIs should include details of acceptance and performance tests which the system will have to satisfy, and which will ultimately form part of the contract terms. Similar KPIs and tests will need to be devised in respect of the other elements of the project which are being procured externally, such as training and maintenance. As regards maintenance contracts tendered, the invitation should address the supply of spare parts and the proposed levels of stock regained by the buyer. Buyers should be aware of the inherent conflict between the supplier and buyer given the link between after sales stock levels and future profitability. Conversely, stock is a potentially significant cost for the buyer and holdings must be kept to a minimum to avoid unnecessary capital commitments.

As part of the tender process, the buyer should consider those factors it considers to be key drivers of the project and the target objectives to be achieved. This process invariably involves some compromise between functionality, flexibility, reliability, cost and speed of delivery. Different weight on a sliding scale should be accorded to each factor and parameter in the context of the particular business goals in order that tender responses can be properly assessed with a degree of objectivity.

4. Overruns

Time and cost overruns can arise for a variety of reasons, not all of which may be attributable to a third party or allow financial redress. Examples include a lack of clearly defined process responsibility, or substantial delays in obtaining planning consent because of objections from local residents, or changes in the buyer's business profile requiring amendments to be made to the specification after the project has begun.

Even where redress exists, such as in respect of defects in the fabric of the building or its electrical systems, it may not be possible for the buyer to secure or negotiate in the relevant supply contracts levels of recompense equal to the potential damage that it may itself suffer. Where a system fails, the consequence may be a wholesale bottleneck in the supply chain – with an incalculable financial impact for which there is no effective remedy. Even in the main contract for the supply of the materials handling system, it may be impossible to negotiate levels of liquidated damages that are commensurate with potential losses, and it may not prove possible to negotiate fixed price contracts with no possibility of increase.

Suppliers will generally try and limit their liability as much as possible and leave themselves room to manoeuvre on price, even on a purportedly fixed-price contract. Everything is subject to negotiation, and although it may well be possible to negotiate a contract that provides absolute protection on these issues, that protection will invariably be as a result of giving up something elsewhere, which is likely to take the form of a higher price for the contract. The certainty of a higher priced contract may be too high a price for some buyers to pay as insurance against the mere possibility of cost or time overruns.

5. Contingency Planning

Given the possibility of cost or time overruns, contingency planning by the project team is essential.

Issues to be considered include funding for possible cost overruns with drawdown facilities having to provide for the possibility of an increase in original budget. This will almost certainly be relevant where the project starts before planning is complete.

If the buyer is currently using outsourced facilities in respect of e.g. warehousing or transport, which are going to be changed or terminated when the project come on-line, it may be worth negotiating flexibility into the existing arrangements to ensure that they can be extended beyond the anticipated termination date, to cover a delayed start.

The financial implications on the buyer's P&L of cost or time overruns should also be assessed – be they as a result of delays to anticipated cost savings, increased expenditure, or delays in the implementation of other projects which are dependent on the materials handling system going live. It's far better to anticipate a sensible provision and forewarn the board, rather than introduce a nasty surprise at the last minute.

Contingency planning must take into account the possibility of the finished plant not performing to the standards, parameters and operating levels expected. It's worth investing time before contract to quantify these costs and to build into the procurement contract proper testing procedures and liquidated damages provisions. Equally, if outsourced, the ancillary operating contract and/or maintenance contract can include similar provisions. Such protection will come at a premium in terms of increased risk they present to the supplier. They may also fall short of the absolute loss that might be suffered by the buyer when loss of profits and loss of opportunity are taken into consideration. But they are extremely useful tools for ensuring that minds stay focussed and that the project and/or the subsequent operation stay on track.

Some Contractual Considerations

1. Type of Contract

The choice of contract when it comes to the procurement of the materials handling system itself is essentially between using a bespoke contract, which is specifically drafted, and using a model contract. A bespoke contract is more expensive and time consuming to produce, but is flexible and can be tailored to the specific requirements of the buyer. Contracts based on a standard model are quicker and cheaper to produce, and the model is likely to already be familiar to the supplier and to specialist lawyers. In the great majority of cases a model contract will be used as a starting point, though it will inevitably have to be heavily negotiated and amended to suit the specific requirements of the transaction. The key point to note from a buyer's perspective is that the model contracts are biased in favour of suppliers. So buyers be warned. Remember, these model contracts are not set in stone and it is usual to amend the same to reflect the specific circumstances.

The three main forms of model contract in use for plant and equipment supply are MF/1, MF/2 and MF/3. MF/1 is designed for use on projects which involve the supply, delivery and on-site assembly of mechanical and electrical plant. MF/2 is designed for use in projects which involve the supply and delivery of mechanical and electrical plant, but where the assembly is carried out by a different party. MF/3 is designed for the purchase of mechanical and electrical goods, as opposed to plant, and is a relatively simple document in comparison to the other two.

For the majority of automated and semi-automated MHE suppliers, MF/1 will therefore be the model contract used to procure a system, and the rest of this section considers certain specific elements of MF/1. It is important to note two things about MF/1: first, it is generally perceived to be supplier-friendly; and second, a supplier whose main business is the sale and installation of plant is likely tobe much more familiar with the detail of MF/1 than a buyer making a one-off purchase. In the circumstances, the benefit of having experienced legal and other advisers who are familiar with the model contract and the process of acquiring plant cannot be underestimated.

2. The Engineer - Interface between Buyer and Supplier

MF/1 provides for the appointment of an independent 'Engineer'. The Engineer carries out a dual function. First, the Engineer acts, in some instances, as the buyer's agent in carrying out administrative tasks in respect of the contract and supervising its performance. This avoids the problem of multiple lines of communication being established between the buyer and the supplier in the performance of the contract. Second, in other instances, he acts as an impartial interface between buyer and supplier in valuing the work carried out and issuing certificates throughout the build as to compliance or performance.

The Engineer should be appointed at an early stage in the process, and certainly before invitations to tender are sent out, as the identity of the Engineer will be important to the supplier. If a buyer is considering appointing an independent system consultant to assist with the project from the outset and advise on the tendering process, then this person could also act as the Engineer. The Engineer can also be asked to carry out a limited design function or comment on the supplier's design for the contract, but caution should be exercised in asking the Engineer to carry out this function as it may reduce the potential liability of the supplier if it can establish that part of the reason for any defects or problems stems from designs produced by the Engineer.

3. Limitations of Liability

MF/1 contains complex provisions limiting the liability of the supplier both in terms of amount and in terms of time limit. In particular, MF/1 contains provisions excluding the supplier's liability for any loss of profit or loss of use suffered by the buyer as a result of any default by the supplier. Provisions of this nature are commonplace in commercial contracts as they closely reflect the English common law rules for the assessment of damages. A buyer is therefore unlikely to be able to persuade a supplier to accept any substantial variation to this provision. Furthermore, MF/1 provides for the supplier's liability to be capped at agreed amounts, and provides that, in the absence of any provision to the contrary, the cap per act or default will be the contract price.

MF/1 also contains specific provisions for liquidated damages at an agreed amount to be paid in the event of late completion of the project as a result of the supplier's default. Unusually, in the event of substantial delay beyond the limit specified for the payment of liquidated damages, un-liquidated damages will apply. The level of such damages will require detailed and hard negotiation. However, the sizeable sums that can be specifically negotiated into the contracts by way of liquidated damages for costs incurred by the buyer as a result of delays, failures etc will usually ensure that the project stays on plan.

MF/1 also contains a limit of 12 months for defects liability, which is designed to protect the supplier from open-ended risk whilst still providing a degree of protection for the buyer. The suppliers' argument is that, with plant and machinery, defects will invariably have manifested themselves within that time period in any event. Again if the right approach is taken, it is possible to extend the warranty period.

The overall effect of all these limitations and liquidated damages is that, no matter how hard a bargain it drives to increase the limitations on liability, it is extremely unlikely to be able to negotiate a position whereby the damages available to it in respect of a supplier's default will ever match the adverse effect that the default has on its P&L. That said, it is critical to make reasonable

amendments to MF1 and reduce the scope of the limitations of liability which, left unmodified, greatly increase the buyer's risk. But even before this stage, it is very important to get the invitation to tender right and to select a supplier with a track record in the sector and in whom the buyer has proven confidence.

4. Exclusive Remedies

MF/1 contains a provision to the effect that the express contract terms are exhaustive as to the rights, obligations and liabilities of the parties. The effect of this provision is that there are no implied terms deemed to be incorporated into the contract. This is unhelpful for the buyer in that it has to take particular care to ensure that the contract exhaustively includes every provision on which it might wish to rely and every protection of which it might want to take advantage. More positively, the parties have a large degree of certainty as to exactly which provisions apply to the contract and which do not.

5. Incorporated Documents

The tender, specification, acceptance and drawings are all deemed to form part of the contract under MF/1. They all accordingly have the status of being contractual documents, and it is therefore essential, from the buyer's perspective, that it is satisfied with them and is satisfied that they are exhaustive before it signs the contract. Any subsequent changes will be deemed to be a variation of the contract for which the buyer will, unless otherwise provided in the contract, have to pay extra.

6. Bonds

MF/1 provides for a performance bond to be provided by the supplier to the buyer in respect of the performance of the contract by the supplier. MF/1 contains a sample performance bond to be used, but the buyer should be aware that, as a performance bond, the sample supplied requires the buyer to prove the default to theguarantor in order to make a claim. That is not the case with a demand bond, where the guarantor will just pay the claim and leave it to the buyer and the supplier to argue about whether the buyer was entitled to make the claim in the first place. As a result there is substantial scope for negotiating improved terms to the form of bonds.

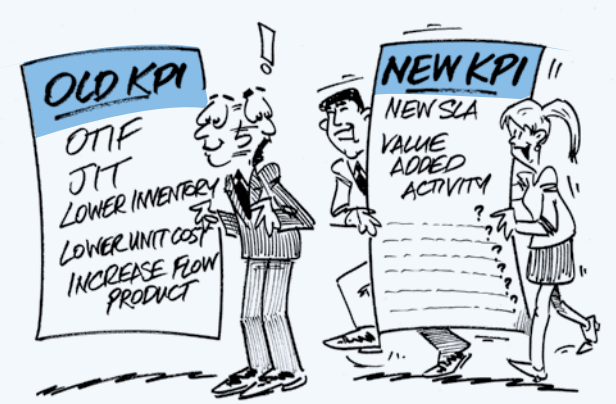
The buyer will want to consider requiring the supplier to provide a separate demand or performance bond in respect of the remedy of any defects discovered by the supplier after completion of the contract, including any that are discovered during performance testing. This is an entirely separate issue from bonds in relation to the performance of the contract itself.

7. Design

The buyer has a choice as to whether or not it wishes to get involved in the design of the system itself. Again, Sainsbury's experiences offer some guidance on the pitfalls of over-involvement. The alternative is for the buyer to simply specify parameters within which the system must operate and the operating levels it must achieve, and then leave the supplier, in its response to tender, to design the system itself within those parameters. The more the buyer involves itself in the design of the system, the more money it is likely to save. However, this will be at the cost of reducing the potential liability of the supplier if the supplier can demonstrate that part of the reason for any defects or problems stems from designs produced by the buyer.

8. Tender and Specification

The tender and specification are critical documents within the contract as a whole, as they will define the scope of the system to be supplied. It is essential that the tender and specification set out exactly what functions the system has to perform, what KPIs it has to meet, what parameters it must satisfy in performance testing, and what peripherals (such as staff retraining, if the system is to be operated by the buyer) are being supplied as part of the contract. The first step in ensuring that the tender and specification are comprehensive is to make the invitation to tender comprehensive. The invitation to tender though does not form part of the contract documents, so from a legal perspective, as opposed to a practical perspective, ensuring that all the elements in the invitation to tender are covered by the tender and specification is critical.



9. System Testing

MF/1 provides for different forms of testing, of which the two most critical from a legal perspective are tests on completion and performance testing.

Tests on completion of works are what determine when the plant is to be taken over by the buyer. The provisions of MF/1 for remedying defects where the tests for completion of works are not passed are highly inflexible and impractical. In practice, the buyer may want to begin operations from the new facility regardless of teething troubles but, under MF/1, if the buyer were to do so then the supplier will be deemed to have passed the tests on completion of works. Accordingly, the buyer will be deemed to have taken over the works. A prudent buyer will seek to amend the relevant provisions of MF/1 accordingly.

Performance testing takes place after the plant has been taken over by the buyer. Its function is to determine whether the system complies with the KPIs set out in the the tender and specification, according to the performance tests specified in those documents. Remedies for failure to meet performance tests can vary, depending on the nature and extent of the failure, from modification of the plant at the expense of the supplier to liquidated damages or a reduction in contract price. At the extreme end of the scale, substantial failure could lead to a rejection of the plant by the buyer in its entirety, though it would be hard to imagine the circumstances whereby a buyer would contemplate taking such a radical course of action.

10. Operating Agreement

Separate from the MF/1 agreement itself, if the supplier, or another outsource supplier, is to take over operation of the plant itself, there will need to be an operating agreement negotiated and implemented.

This will contain detailed provisions concerning KPIs to be achieved in relation to the operations, many of which will reflect, but be slightly different to, KPIs set out in the original invitation to tender and/or tender and specification and/or performance tests. The operating agreement will also include detailed provisions setting out agreed levels of liquidated damages to be paid by the supplier in the event of it failing to achieve the KPIs.

If the opening of the new facility means the closing of an existing facility, there is a strong possibility that, rather than make redundancies, the buyer will want to utilise some of its operations staff in the new facility. If that is the case, the operations agreement will have to contain detailed provisions concerning the retraining of staff and any TUPE implications, or otherwise dealing with how the buyer's staff interface with the supplier's staff.

It is important for buyers to be aware at the outset that suppliers are keen to enter into post completion support arrangements, often making a significant proportion, if not the bulk, of their return from ongoing operations, where these are outsourced. Operating agreements of this nature can therefore be every bit as detailed, and every bit as heavily negotiated, as the main MF/1 contract itself.

11. Maintenance and Spare Parts

Separate from MF/1 and any operating agreement, the buyer will need to enter into an agreement with a service company, which may or may not be the original supplier of the plant, for its ongoing support (such as help desks), the maintenance of the plant and related IT systems, and the procurement of spare parts. Aside from provisions concerning routine maintenance, the maintenance agreement will contain detailed provisions dealing with resolution of problems and response times for dealing with problems, which will vary according to their seriousness. Again, the maintenance agreement will need to contain provisions for the payment of liquidated damages in the event of the maintenance supplier failing to meet the agreed response times.

The maintenance agreement will also contain detailed provisions concerning the level of spare parts which the buyer will be required to hold. These provisions will detail which party is to be responsible for ensuring that the agreed levels are maintained, and if it is to be the supplier, the agreement will need to contain checks and balances in favour of the buyer to ensure that the supplier acts reasonably.

As with any operating agreement, if the opening of the new facility coincides with the closing of an existing facility, the buyer may want to try and reduce redundancies and their related costs by trying to utilise some of its maintenance staff in the new facility. As with the operating agreement, this means that the maintenance agreement may contain provisions concerning retraining, TUPE and/or interface with the supplier's own staff. As with operating agreements, suppliers can make a significant proportion of their money from the ongoing maintenance of the plant and the IT, and from the supply of parts. Like operating agreements, maintenance agreements of this nature therefore tend to be very detailed and very heavily negotiated.

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