Chapter 21 - Performance Based Contracts and Service Level Agreements

Chapter highlights

Purpose: This chapter covers performance-based contracting and service level agreements used in the acquisition of information technology goods and services.

Key points:

- Performance-based contracting (PBC) is a procurement method that structures all aspects of the procurement around the purposes of the work to be performed instead of describing the manner by which the work is to be performed.
- The most important element of a PBC, and what distinguishes it from other contracting methods, is the results that are desired.
- The agency should determine at least one performance indicator and standard for each task and deliverable and link them to a description of acceptable quality.
- Performance incentives may be positive or negative and may be monetary or non- monetary—based on cost control, quality, responsiveness or customer satisfaction.

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21.0 Introduction

The VPPA does not include requirements for the use of performance-based contracting by the Commonwealth's agencies. Within the technology industry, however, government procurement officials recognize this procurement method as an extremely valuable way to procure information technology goods and services. Performance-based contracting allows government to better control its functional, technical, schedule and budgetary objectives and outcomes for a particular procurement. This is accomplished by the use of performance surveillance and the application of positive and negative incentives to motivate the supplier.

21.1 Performance-based contracting

Performance-based contracting (PBC) is a procurement method that structures all aspects of the procurement around the purposes of the work to be performed instead of describing the manner by which the work is to be performed. PBC allows agencies to acquire products and/or services via contracts that define what is to be achieved and gives the supplier the freedom to bring new approaches to the project. The procurement seeks to elicit the best performance the supplier has to offer, at a reasonable price or cost, by stating the project's objectives and giving suppliers both latitude in determining how to achieve them and incentives for achieving them.

A statement of work (SOW) should provide performance standards, rather than spell out what the supplier is to do. PBCs normally contain a plan for control and a plan for quality assurance surveillance. In addition, the contract typically includes performance incentives. This is accomplished through clear, specific, and objective contract requirements and measurable outcomes, instead of dictating the manner by which the work is to be performed or broad and imprecise statements of work.

21.1.1 PBC is results-oriented

The most important element of a PBC, and what distinguishes it from other contracting methods, is the results that are desired. Many IT procurements are traditionally directed by the customer in the form of exact specifications or requiring key personnel to be assigned to a service contract. Attempts by the supplier to suggest alternative ways of approaching the work are usually rejected with the suspicion that the supplier is trying to reduce costs to increase profits resulting in an inferior outcome. In performance-based contracting, the results required of the supplier are described using a statement of work or a statement of objective. The key attributes of PBC are:

- Outcome oriented
- Clearly defined objectives
- Clearly defined timeframes
- Performance incentives
- Performance monitoring

21.1.2 PBC objectives

By describing requirements in terms of performance outcomes, and not requiring detailed specifications, agencies can help achieve all of the following objectives:

- Maximize performance—allow a supplier to deliver the required service based on its own best

practices and the customer's desired outcome;

- Maximize competition and innovation—encourage innovation from the supplier base using performance requirements;
- Minimize burdensome reporting requirements and reduce the use of contract provisions and requirements that are unique to the state;
- Shift risk to suppliers so they are responsible for achieving the objectives in the Statement of Work through the use of their own best practices and processes; and
- Achieve cost savings through performance requirements.

21.2 Elements of PBCs

There are four main elements of performance-based contracting:

- Statement of work (SOW): a written document describing the technical, functional and/or service requirements and customer expectations in terms of measurable outcomes rather than by means of prescriptive methods.
- Measurable performance standards: written definition of what is considered acceptable performance to determine whether performance outcomes are met.
- Quality control plan: a written document describing how the supplier's actual performance will be monitored and measured against the contractually established performance standards.
- Incentive plan: written procedures addressing how met and unmet contractual performance standards will be resolved, escalated, remediated and/or remunerated. Incentives may be linked to price or fee adjustments. While not mandatory, incentives can be used, where appropriate, to encourage performance that will exceed the established performance standards.

21.2.1 Developing a PBC Contract

In a PBC relationship, the contract must include:

- Everything you are buying (covered by the contract).
- Volume assumptions for the service (particularly if there are large variable costs involved).
- Reliability, availability and performance (RAP) requirements, methods of dealing with operational problems (escalation, help desk, hot line and severity levels) and conditions of use or change of use conditions/restrictions.
- Any dates/deadlines where specific deliverables are due at initial switch on, ramp up, ramp down, or upgrade of service; e.g., year end, implementation dates, delivery of upgrades, legislation changes.
- The method of delivery (e.g., paper/fax/personal delivery/electronic means/source or object code).
- Time after which the deliverables must be consumed or tested and still supported (obsolescence limits).
- Documentation/manuals and standards.
- Definition of what is considered a service failure and what is considered an enhancement to the service; e.g., what is a software bug and what is an enhancement.

21.2.2 PBC success factors

PBC shifts the cost and performance risks from the customer to suppliers, while giving suppliers more latitude for determining the methods of performance and more responsibility for the quality of performance. Agencies that utilize PBC may find that many areas of contract disputes are eliminated. Since the supplier is responsible for methods and results, disputes over ambiguities in specifications and accountability for performance failures will likely be minimized. Agencies which develop quality control

plans (QCPs) that allow the supplier to determine how the work will be done may significantly reduce the need for agency oversight of supplier performance. When designing a PBC the following factors can be critical to your success:

- Provide clear strategic and program logic for the agency/project.
- Clearly determine the scope of work and what performance measures will be used.
- Define agency baseline and what level of performance is expected.
- Include provisions for flexibility and incentives.
- Canvass providers/suppliers to find out:
  - What measures would they propose?
  - What incentives would they want? How?
  - How would they want to report performance data?
- Craft a performance-based statement of work for the contract that:
  - Includes mechanisms for measurement, reporting, monitoring and supplier feedback.
  - Defines a system for revisions and reconciling deviations in expected performance.
  - Considers a transition period "hold harmless" clause.
  - Monitors performance with regular reporting requirements.
  - Can be adjusted when needed.
- Identify factors that might impact performance.
- Devise corrective action plans for deviations.
- Benchmark and compare.
- Revise performance targets to continue to achieve progress.
- Provide comparative performance data for suppliers; create a "race to the top" culture.
- Communicate and reward success.

21.2.3 Defining performance needs and incentives

When preparing a PBC, be creative about how the contract can best accomplish the agency's business needs. Below are some guidelines:

- Think creatively.
- Avoid rewarding suppliers for simply meeting contract requirements.
- Recognize that developing clear, concise, objectively measurable technical performance incentives will be challenging and may take additional planning time.
- Create a proper balance of objective incentives—cost, schedule and technical.
- Ensure the performance incentives focus the supplier's efforts on the most important objectives.
- Make performance incentives challenging and attainable.
- Ensure that incentives motivate the supplier to follow measurable quality control processes.
- Consider linking on-time delivery to technical performance by establishing delivery targets based on project goals and metrics. You can then monitor performance success by looking at how these objectives were met by the supplier.
- Encourage open communications and permit suppliers to comment on the performance-based work statement.
- Identify the magnitude of technical, cost and schedule risks and create mitigation solutions.
- Consider procurement history—factors that contributed to past successes and failures in meeting goals and fulfilling needs.
- Be sure to include incentives for quality, even though they might be difficult to describe.

- Consider including socio-economic incentives.
- Use clear, objective formulas for determining technical performance incentives.
- Include incentives for overhead cost control.
- Involve users, program, technical, procurement and financial staff in incentive planning.
- Make sure that incentives are closely related to the performance objectives.
- Keep the focus on performance; limit other requirements.
- Keep the structure and administration as simple as possible.
- Remember that subjective evaluation has its place in encouraging and recognizing outstanding performance.

21.3 Performance measures

In PBC, the customer states all desired results or outcomes and the supplier is responsible for producing them. To encourage even higher levels of performance when using PBC, performance incentives are made a part of the contract. They may be monetary or non- monetary and should be SMART as follows:

- Specific
- Measurable
- Accountable
- Results oriented
- Time-bound

For PBC to be successful, the actual performance of the supplier must be measured against specific standards established by the agency before the solicitation is issued so that suppliers can propose in a way that will meet the standards. There are two types of performance measures:

- Performance indicators specify essential characteristics of performance that are acceptable.
- Performance standards describe a definite level or degree of quality for measuring performance. Performance standards must be measurable, achievable, relevant, and controllable.

The agency should determine at least one performance indicator and standard for each task and deliverable and link them to a description of acceptable quality. An acceptable quality level (AQL) must be determined by the agency so that the supplier can be evaluated against this pre-established level as work on the contract proceeds. The AQL establishes a maximum allowable variation, or error rate, from the standard. The AQL must be realistic and determinable. Quality surveillance methods are used to evaluate whether the contract's performance standards have or have not been met. PBC performance measures should measure what is important including:

- Total cost of ownership
- Quality of goods/services
- Proposed technical performance
- Financial stability
- Cost of training
- Qualifications of individuals employed/utilized by supplier
- Risk assessment
- Availability and cost of technical support
- Past performance
- Cost/price

Performance analysis assigns a performance requirement to each task, which involves determining how

a product/service can be measured and what performance standards and quality levels apply. The performance standard establishes the performance level required by the agency. Correspondingly, the AQL establishes a maximum allowable error rate or variation from the standard. Agencies should ensure that each standard is necessary, is carefully chosen and not unduly burdensome. Failure to do so can result in unnecessarily increased contract costs. There are often established industry performance standards for repeatable services, uptime/downtime reliability, hardware and packaged software that the market providers publish online or with their documentation. These can be used as a guide for agencies in developing a project's specific performance needs versus the agency's specific or unique business needs.

Agencies should carefully and methodically establish the quality level at which performance standards are set. The minimum acceptable performance standard should rarely be 100 percent, since the standard directly affects the cost of the service. Conversely, if the quality level is too low, it may act as disincentive to good contract performance. Where appropriate, agencies may provide either a specific performance standard or allow the supplier the option to propose different target levels of standards of service along with the appropriate price adjustment. This allows suppliers an opportunity to propose what they consider to be the most cost-effective performance standard level. In order to properly evaluate alternative levels of standards proposed by the supplier, agencies need to do market research into the feasibility of accepting these alternative levels, i.e., discuss contracting methods and acceptable levels of standards for the same type of service with other commercial entities.

Standards may be published or well recognized, industry-wide standards, or may be developed by the agency. Agency standards should have industry input to ensure they are realistic and effective. This may be done through public meetings, public comment on proposed standards, or Requests for Information.

21.3.1 Data gathering

Agencies may incorporate a performance requirement in the statement of work for the incumbent supplier to capture and report accurate workload data. This information can be used to help develop the baseline for future contract work estimates.

21.3.2 Cost analysis

Estimated costs must be computed for each service or output based on available data. These costs are used in preparing the agency's estimate, evaluating proposals and determining positive and negative performance incentives.

21.3.3 Performance measurement and metrics

A core strength of PBC is that it places the agency in a position to objectively evaluate performance. By clearly defining the performance metrics against which success will be measured, personalities and other subjective influences are taken out of the equation. Successful PBC allows for measurement of metrics in three stages:

- A baseline period allowing for due diligence by both parties;
- A ramp-up period, typically 90 days;
- Full execution of the metrics and associated incentives/disincentives.

An excellent example of a tiered measurement approach is the help desk, one of the most common performance-based contracts in effect today. By monitoring metrics such as call length and wait times, and applying those metrics to clearly defined baseline, ramp-up, and execution periods, procurement officials can create a firm foundation from which to negotiate if requirements change. Everything is up-front, in writing, and lasts the life of the project.

One critical caveat regarding metrics in contracting is the importance of adequate infrastructure. With the advent of metrics-driven, performance-based contracting, agency procurement management teams must have the capability to properly evaluate metrics in order to accurately evaluate success or the lack thereof.

21.3.4 Payment for performance

An effective payment to performance incentive structure is to stipulate a maximum total payment, for example, and the supplier would get components of that based on meeting certain metrics. Performance-based metrics change over the length of the contract and must be continually reassessed.

A prudent guideline is to always tie payment to performance, not just by the use of incentive and award fees, but also by tailoring the acceptance provisions (and thus payment) for contract deliverables to performance objectives. If the requirement is framed as a series of deliverable products or specific services, then performance and acceptance precede payment. This is in sharp contrast to time-and-materials contracts, labor-hour type contracts, and some task orders. If an agency sets a goal for the procurement, such as savings in operations, some of the supplier's payment could be a percentage of the savings achieved by the project. Timelines and quality improvements could be other options for performance-based payments. All those options require good service-level agreements.

21.4 The PBC statement of objective (SOO)

When developing a PBC solicitation or request for quote under a VITA statewide contract, consider including a statement of objective (SOO) where the agency defines results to be achieved, but outputs are not predetermined. The SOO will include performance incentives tied to achievement of performance results (impact of outputs) and may include cost, timeliness, quality and impact of outputs associated with the supplier's technical solution. The SOO allows maximum flexibility to the supplier on what work is to be done providing opportunity for innovation. A SOO provides the same information to each potential supplier, but then each supplier responds with the specifics as to how it will meet the desired objectives. For the successful supplier, the description of how it will meet the SOO will become a part of the contract, or order issued under a VITA statewide contract. The SOO business or mission objectives become the core of the solicitation, or request for quote under a VITA statewide contract. Suppliers then become responsible to describe how they will achieve the agency's objectives.

21.5 The PBC statement of work (SOW)

Agencies should use an interdisciplinary team approach in developing the PBC SOW, including at a minimum, the business owner, assigned contracting officer and a technical representative. This team approach will result in a better final SOW and limit the potential for disagreements prior to award and during performance. It also serves to involve program personnel early in the procurement process. Including a SOW in the solicitation, or the request for quote issued under a VITA statewide contract, gives each supplier the same information from which to prepare its offer. The winning supplier will then perform the contract or order following the final, negotiated SOW's requirements.

21.5.1 General guidelines for SOW preparation

The PBC SOW should describe in detail what the supplier is to accomplish through addressing the four elements—what, who, when where and how. The how element should allow flexibility and allow the supplier to propose its approach for how the results or outcomes will be achieved by their firm. These four elements should include:

- What is to be done and what are the deliverables/milestones.
- Who is going to do what (agency, supplier, third party CoVA agent, etc.).
- When is it going to be done by deliverable and/or milestone?
- Where will it be done?
- How will it be done and how will the agency know when it is done (i.e., testing and acceptance)?

The PBC SOW must be written as a concise, declarative, verb-driven document as it is a statement of the customer's required goods/services in terms of outcomes and includes a measurable performance standard(s) and an acceptable quality level for each outcome. Best practices PBC SOWs describe the work in terms of the results to be achieved and look to the supplier to determine how the results will be

achieved and how best to organize the supplier workforce to achieve those results. A well-written PBC SOW should:

- Be a stand-alone document.
- Define requirements in clear, concise language identifying specific work to be accomplished.
- Be individually tailored to consider the period of performance, deliverable items, if any, and the desired degree of performance flexibility.
- Not repeat material that is already included in other parts of the solicitation or contract.
- Express desired performance outputs in clear, concise, commonly used, easily understood, measurable terms.
- Not include broad or vague statements, overly technical language or detailed procedures that dictate how work is to be accomplished.
- Be structured around the project's objective(s) or purpose of the work to be performed, i.e., what is to be performed rather than how to perform it. For example: instead of requiring that the lawn be mowed weekly or that trees be pruned each Fall, state that the lawn must be maintained at a height of 2-3" or that tree limbs not be allowed to touch utility wires or buildings.

A SOW will minimally include the following components:

- Introduction: a general description of the procurement.
- Background: information that helps suppliers understanding the nature and history of the requirements.
- Scope: overview of the SOW that relates the important aspects of the requirements.
- Applicable directives (if any): referenced documents, specifications or directives that are either mandatory or informational for the procurement.
- Performance requirements: what is required to be done, the performance standards, and the acceptable quality levels. Performance requirements should enable assessment of work performance against measurable performance standards; they rely on the use of measurable performance standards and financial incentives in a competitive environment to encourage competitors to develop and institute innovative and cost- effective methods of performing the work.
- Information requirements: reports, software, deliverables, and formal requirements that must be submitted as part of the engagement.
- Quality assurance and acceptance criteria: Acceptance is the agency's formal, written process to acknowledge that the goods/services conform to the applicable SOWs quality, quantity and other requirements. Acceptance may or may not involve quality assurance processes and typically precedes payment. The procedure for formal acceptance should be provided for any milestone deliveries, as well as final acceptance.

21.5.2 Developing performance requirements and standards

In describing the specific requirements which must be met in performance of the contract, the customer will provide a standard of performance for each required task and identify a quality level the agency expects the supplier to provide for each task. The QCP (see 21.6 below), which directly corresponds to the performance standards and measures supplier performance, is needed to determine if supplier services meet contract SOW requirements. Positive and/or negative performance incentives based on QCP measurements should be included. Application of only selected aspects of the total PBC methodology is not likely to be successful and may even cause a reduction in the value of goods/services provided.

Required services should be described in terms of output and should identify only those outputs that are

essential. The performance requirements should be written clearly and succinctly, yet with sufficient flexibility for the supplier to determine the best manner in which to perform the work. It is critical to set forth a measurable performance standard for output which establishes the performance or service level required by the agency/project. The performance standards are the criteria used to assess whether the supplier has satisfied the performance requirements. The performance standards should also be written to provide "what, when, where how many, and how well the work is to be performed."

Be sure that the standards are not only clearly defined, but also necessary, not unduly burdensome, and carefully chosen. The agency should include an acceptable quality level (AQL) or a maximum allowable error rate which establishes what variation from the performance standard is allowed. For example, in a requirement for software as a service, a performance standard might be "the response time for technical assistance requests must be within 4 hours of any email request and the AQL might be a 2% per incident one-time reduction in the monthly subscription fee, to be calculated on the next month's invoice." The "minimum acceptable performance standard" should rarely be 100 percent, since the standard directly affects the cost of the service. Conversely, if the quality level is too low, it may act as a disincentive to good contract performance.

21.6 Quality control plan (QCP)

A QCP is a written document that establishes what the customer must and will do to ensure the supplier performs in accordance with the agreed-upon performance standards set forth in the contract. A QCP helps to ensure the supplier delivers and the customer receives the quality of services stipulated in the contract. It will also support that the customer pays only for the delivered services that are acceptable by conforming to the contract's requirements. A QCP forms the basis for establishing appropriate performance incentives. Since the SOW, QCP and incentives are "interdependent," they should be "compatible in form, style, and substance, and be cross-referenced." In summary, these elements should make sense when read together and be well referenced throughout the performance-based contract.

What the agency must do to ensure that the supplier has performed in accordance with the SOW performance standards can range from a one-time inspection of a product or service to periodic in-process inspections of on-going product or service deliveries. A successfulQCP should include a surveillance schedule and clearly state the surveillance method(s) to be used. The QCP also establishes how resources will be used to ensure that the contract requirements are fulfilled by allowing the agency to clearly define the amount of contract administration resources needed.

The detail in the QCP regarding a particular task should:

- Be proportionate to the importance of the task.
- Focus on the level of performance, quality, quantity, timeliness, etc. of the performance outputs to be delivered by the supplier.
- Not focus on the methodology, steps or procedures used by the supplier to provide the products/services or achieve the required level of performance.
- Recognize the responsibility of the supplier to carry out its quality control obligations.
- Contain measurable inspection and acceptance criteria corresponding to the performance standards in the SOW.

21.7 Quality assurance surveillance plan (QASP)

The QASP is the guide that will be followed by both agency and supplier as the engagement is managed. It provides the methodology for monitoring performance against standards for required work. It provides for scheduling, observing, and documenting supplier performance against standards; accepting service; determining causes for deficiencies; and calculating payment due.

Similar to the QASP is the supplier's quality control plan (QCP). The QCP will be developed by the supplier and will be submitted as part of the proposal for evaluation by the agency. After award, the QCP will be

the plan the supplier is to follow during the performance of the contract. These two documents, the QASP and the QCP, are the control documents for the engagement.

Selecting the most appropriate surveillance method for the effort involved is important. Agencies should take into consideration task criticality, task lot size, surveillance period, performance requirements and standards, availability of quality assurance data, surveillance value in relation to task cost/criticality, and available resources. Careful selection of appropriate surveillance methods enables the agency to determine the number of resources and associated costs needed to perform the surveillance task. Appendix 21.7 of this manual contains a list of the different acceptable surveillance methods that can be utilized.

21.8 Developing performance incentives

Performance incentives should be incorporated into the contract to encourage suppliers to increase efficiency and maximize performance. These incentives should be applied selectively and correspond to the specific performance standards in the QASP and be capable of objective measurement. Incentives should apply to the most important aspects of the work, rather than every individual task. Fixed-price contracts are generally appropriate for services that can be defined objectively and for which the risk of performance is manageable. Incentives are not penalties but should be developed and used to encourage superior performance in areas of particular importance or to motivate supplier efforts that might not otherwise be emphasized.

Performance incentives may be positive or negative and may be monetary or non- monetary; i.e., based on cost control, quality, responsiveness or customer satisfaction. Care must be taken to ensure that the incentive structure reflects both the value to the agency of the various performance levels and a meaningful incentive to the supplier. Performance incentives should be challenging, yet reasonably attainable. The goal is to reward suppliers for outstanding work with a positive incentive for the supplier's benefit, and equitably, a negative incentive for the customer's benefit, when supplier performance does not meet the contractual schedule, quality standards or service levels. The incentive amount should correspond to the difficulty of the task required but should not exceed the value of the benefits the agency receives. Agencies need to monitor to ensure that desired results are realized; i.e., that incentives actually encourage good performance and discourage unsatisfactory performance.

Where negative incentives are used, the deduction should represent as close as possible the value of the service lost. Negative incentives are deductions for failure to perform a required task up to required quality levels or for failure to timely meet a time-sensitive deliverable or milestone. Negative incentives generally represent a percentage price reduction tied to the magnitude that performance fails to meet the AQL. For example, if a given task represents 10 percent of the contract costs, then 10 percent will be the potential maximum deduction in the event of task failure.

Similarly, if a task is not performed to the AQL stated in the quality standards of the contract, deductions are computed based upon tables or formulas designed to reflect the value of substandard output. For instance, the AQL may require the supplier to perform a task correctly 95 percent of the time. Rather than withhold contract payment for anything less than 95 percent performance, the contract could provide that for every percent that performance falls below 95 percent, payment for the task will be reduced by 20 percent. Incentives, both positive and negative, can be a powerful tool to ensure superior contract performance results.

Verifying and validating the effectiveness of the contractual incentives used is important. Agencies need to monitor the effectiveness of incentives throughout the course of the contract to ensure that the incentives are resulting in enhanced performance or discouraging unsatisfactory performance. Incentive payments should be selectively applied. Remember that in a PBC situation, the agency should have already built in an incentive for successful performance by basing contract payments on achieving an acceptable or minimum level of quality or meeting certain deliverables and/or milestones.

Appendix 21.8 to this manual provides information on various types of potential performance incentives.

21.9 Selecting the PBC incentive strategy

Agencies should carefully select procurement and contract administration strategies, methods, and techniques that best provide the proper contract motivations to encourage high-quality supplier performance. One way to accomplish this business goal is to craft procurement strategies that make effective use of incentives. The appropriate selection and use of incentives can "make-or-break" procurement success—especially when acquiring IT services. There are seven broad types of incentives that agencies should consider in developing a performance-based procurement strategy:

- Use of incentive contracts
- Modular strategies
- Options as incentives
- Multiple awards
- Payment strategies
- Value engineering
- Past performance evaluation and recognition

21.9.1 Use of incentive contracts

The agency's obligation is to assess its requirements and the uncertainties involved in contract performance and select a contract type and structure that places an appropriate degree of risk, responsibility and incentives on the supplier. There are various types of incentive contracts including:

- Fixed-price incentive contracts: the final contract price and profit are calculated based on a formula that relates final negotiated cost to target cost. These may be either firm target or successive targets.
- Fixed-price contracts with award fees: used to motivate a supplier when supplier performance cannot be measured objectively, making other incentives inappropriate.

Incentives need not be limited to cost but can vary depending on the procurement and performance goals, requirements and risks. For example, agencies can incorporate delivery incentives and performance incentives—the latter related to supplier performance and/or specific products' technical performance characteristics, such as speed or responsiveness. Incentives should be based on target performance standards instead of minimum contractual requirements. However, the VPPA prohibits the awarding of contract with pricing based on the supplier's cost plus a percentage of cost, so care should be taken in structuring incentives to comply with the statutory requirements (§ 2.2-4331 of the *Code of Virginia*).

The decision about the appropriate type of contract to use is closely tied to the agency's needs and can go a long way to either motivate superior performance or contribute to poor performance and results. In general, when using PBCs an agency has wide discretion in determining the contract type, pricing structure and degree of risk that will be placed on the supplier. Under PBC, suppliers may propose a range of staffing options and technical solutions, and it is the agency's job to determine which proposal will produce the best results. The decision on contract type is not necessarily either-or. Hybrid contracts, those with both fixed-price and incentives, are becoming more common, especially when procurements are constructed modularly.

21.9.2 Modular strategies

Modular contracting is an important incentive strategy. Rather than awarding mega contracts that give suppliers a lock on huge amounts of agency business for years, the agency instead constructs its procurement strategy in successive "chunks." In a mega contract, the incentive is to win the contract, not necessarily to provide superior performance after award. Under modular contracting, future business is

much more dependent on successful contract or task performance, and suppliers have an increased incentive to perform at a high level, so they are awarded the next task, option, or contract. Modular contracts lend to easier project governance and control, and in some cases, to annual budget constraints. Likewise, if a supplier is under performing, terminating a part of a project may be less detrimental to all parties than terminating a mega contract in the middle of its term. If the project is part of a larger federal or state technology initiative, the modular approach allows time for the project to align with any legacy or interfacing dependencies and schedules so the agency isn't at risk of a schedule slip wherein a supplier would demand some remuneration for its need to put resources or other dedicated project assets on hold for the Commonwealth.

21.9.3 Options as incentives

An option is the agency's unilateral right in a contract and within a specified time to purchase, or not to purchase, additional supplies or services or to extend, or not to extend, the term of the contract. To increase supplier incentive and motivation, the solicitation and contract should indicate that the agency's future decision to exercise contractual options for additional quantities, services, or contract term is contingent on the supplier's successful performance. The more specific the standards of performance, the more likely the supplier will achieve them because both successful performance evaluation and additional business are at stake.

21.9.4 Multiple awards

An agency may consider making multiple awards to increase competition among suppliers and to generate incentivized response by multiple suppliers contracted for the same products and/or services, where they bid against each other for purchases under the multiple-award contract. If this is a selected strategy for the agency, it must be included in the solicitation as a stated intention of award.

21.9.5 Payment strategies

A payment strategy is not limited to incentive or award fees but may include payments tied to performance and acceptance. For instance, a payment incentive schedule may include 100% payment for on-time deliveries that are validated to exceed or conform to performance requirements; while delinquent deliveries or those with diminished performance may have payment reductions based on calculated increments or percentages tied. See sections 21.3.4, 21.5. 2 and 21.8 for other examples.

An award fee is earned incrementally during performance and is in addition to and separate from any other fees available under the contract and is available only when the supplier earns a performance rating of excellent for the award fee period. The amount of the fee earned is based upon a formula established by the contract, and no fee can be earned during any period when the actual contract costs exceed the should-cost estimate. Also, the VPPA prohibits the awarding of contract with pricing based on the supplier's cost plus a percentage of cost. (Virginia Code § 2.2-4331.)

Another payment incentive strategy is to include a set withholding percentage from each milestone deliverable, with payment of the retained amount is paid to supplier after final acceptance. The holdback can be any percentage, but it is advisable to begin with no less than 10-15%. This holdback incentivizes supplier to perform well all the way through to the end, so it is ensured to get the held back amount. It also acts as a protection to the agency, should the supplier not perform well, not satisfy all contractual requirements, or slip schedule and/or budget.

21.9.6 Value engineering

Value engineering, sometimes referred to as "value methodology," is a well-planned and thought out, structured approach to analyzing function to cost in order to achieve cost savings without compromising performance. This evaluation looks at the life cycle of the project, what is to be achieved and how costs can be reduced by eliminating unnecessary expenditures, thereby adding value, but without losing the required performance, quality and reliability of the goods/services/systems being procured. This methodology offers concepts like engineering re-use that the supplier and/or the agency can utilize to avoid duplicative expenses for existing or repeatable engineering, software or products instead of paying

for it all over again for the new project. An incentive fee may be much less costly than paying for something that the supplier may have done for another customer and that they have the rights to use for their other customers. From the agency perspective, another state may have a reusable technology component they allow other states to reuse at no cost, but by simply signing an agreement with that state. In this case, there would not be any incentive to the supplier, but a direct cost savings to the project's budget. Refer to section 21.10.3 of this chapter for more discussion of reusable technology as it relates to technology transfers.

21.9.7 Past performance evaluation and recognition

Past performance fact-gathering should reflect adherence to performance requirements and provides better data for evaluation of past performance under other contracts. A powerful incentive of excellence and customer satisfaction is created when suppliers know their performance will also influence future award decisions.

Due to the increased importance agencies now place on past performance in selecting suppliers for award, contract performance evaluation has become a powerful incentive. If possible, agencies should determine supplier's history of reasonable and cooperative behavior and commitment to customer satisfaction, and business-like concern for the interest of the agency. To the extent possible, the agency's approach to evaluating these measures of conformance and quality, timeliness, cost control, responsiveness and customer satisfaction should be described in the solicitation and contract.

21.10 Service level agreement (SLA)

A service level agreement (SLA) is a document of requirements, either part of an overall contract or a standalone agreement, which specifies in measurable terms the services to be provided, the standards to be attained in the execution of those services, and the consequences that occur in the event the standards are not met. SLAs often include:

- Percent of time services should be available
- Number of users to be supported
- Performance benchmarks
- Schedule for advanced notification of system changes, upgrades, downtime
- Help desk response time
- Usage statistics

21.10.1 Key points to developing a successful SLA

Agencies should undertake due diligence when developing and negotiating effective SLAs. This will allow an opportunity to verify costs of services, identify hidden costs, reveal consumption patterns, ensure legality of software licenses, and conduct benchmarking tests on systems. SLAs should include flexibility for changes in scope and technology.

The contract will stipulate that the supplier will be paid according to predetermined performance criteria such as availability, response time, number of downtime occurrences, etc. SLAs should include specifications regarding financial remedies or offsets in the event the supplier is unable to meet the SLA performance levels. If the supplier relies on partners or sub suppliers, the SLA can also apply to these second-level service providers while containing a clause that stipulates the primary supplier is accountable for any damages caused by third party partnerships.

In developing and negotiating a successful SLA, the following elements should be considered and included:

- Definition of the agency's business goals, requirements and scope of services being procured.
- A detailed service description, duration of services, installation timetable, payment terms, terms and conditions and legal issues such as warranties, indemnities and

limitations of liability.

- A repeatable process, with solid and accurate metrics' capture and analysis, tomeasure the supplier's progress and monitor performance.
- A documented reporting process that includes the type, amount, format and a schedule of information to be reported by the service provider and procedures for how the customer will oversee the agreement and ensure the performance measures aremet.
- Agreed upon procedures for non-performance in case of unforeseencircumstances.
- Detailed service expectations, performance levels, positive and negative incentive structure, escalation procedures and legal ramifications; i.e., breach anddefault.
- An executed contract that binds the agency and the service provider; the SLA will be a part of this contract.

21.10.2 Internal SLAs

In many circumstances it is advantageous to provide SLAs for internal as well as external services that are used during contract performance, or upon which supplier performance will depend. From the point of view of the service provider it establishes norms and expectations and can justify the existence or enhancement of the service, particularly if measures of performance are maintained. From the point of view of the service consumer it also establishes agreed-upon needs, norms and expectations.

21.10.3 SLAs in a technology transfer relationship

In relation to technology transfers from U.S. federally funded resources, you may want to become familiar with the Bayh–Dole Act or Patent and Trademark Law Amendments Act that deal with intellectual property arising from federal government-funded research. Technology transfers are more likely to be used in projects by universities and institutions, including technology and knowledge transfers between colleges and non-profit organizations; however, they may also occur between states and the federal government for major initiatives like health, medical, social services, homeland security and such. In rare cases, technology transfers may be used in projects where the agency business owner is familiar with existing technology from other states.

In all technology transfers, an agreement of associated usage, transfer, access, modification, etc. rights and restrictions between the transferor (granting source) and transferee (agency) will be required to actually use the technology in your project. It is advisable to have the OAG review any such agreement your agency may need to sign prior to confirming the technology transfer in your project strategy. Be sure to pass on any restrictions of use, confidentiality, etc., to all involved suppliers and agency agents like VITA. Also, your agency may need to discuss using the technology with VITA's Enterprise Architecture division to ensure any infrastructure compatibilities, limitations, dependencies, governance requirements or approvals. Please refer to Chapter 27 below for a comprehensive discussion of intellectual property.

SLAs are critical to a technology transfer relationship because they provide accountability and serve as the basis for measuring the supplier's performance. The closer the application is to the core of an agency's business processes, the more important the service level agreement becomes. Such agreements should detail the specific quality, availability, performance levels and support services the agency can expect from its service provider. In addition, the SLA should address the factors that directly affect the agency's business, such as expected response times for computer applications, system capacity and interface compatibility.

Response time metrics are often developed in contract negotiations. The minimum threshold in negotiating performance expectations in the service level agreement may be the existing service levels the agency is receiving from its prior technology. The contract should specify a system's components. Once the equipment is clearly identified, the supplier may commit to certain performance levels based upon use of the specified equipment. The supplier also may be willing to give a terminal response time warranty if the hardware and software configurations are stated with specificity. Agencies may seek financial remedies for failure to meet established minimum requirements, or offer positive incentives

based on performance. Response time terms also protect an agency from the effects of a successful supplier's inevitable difficulties in handling growing business.

Below are special considerations for including in technology SLAs:

- Software functionality: A technology transfer agreement should describe in detail the functionality of the software. Functional specifications should outline the business operations that are to be performed. If these specifications are determined prior to the signing of the final contract, they should be included as part of the contract. Otherwise, the agreement typically should establish milestones for development goals. The agreement should also call for delivery of documentation. User documentation provides essential operating instructions and identifies the functions of the computer system, while systems documentation provides a computer programmer with the information necessary to modify the computer software (assuming that the user can negotiate modification rights). Documentation is often a neglected step in software development as the developer strives to meet its schedule and stay within its budget. While there is no industry standard for the quality of computer documentation, the technology transfer agreement should explicitly specify the minimum documentation required, including documentation for changes to the technology. Future changes to the technology received in the transfer could impact your use of it either negatively or positively, or could render your use of it obsolete, invalid, etc.
- System configuration: Compatibility between an agency's existing system and the products selected by the supplier is essential to the efficacy of any technology transfer relationship. The agreement should specify the compatibility requirements of the supplier's system with the agency's existing system. For example, in an outsourcing deal, the supplier may transfer the customer's existing software and hardware operations to its more powerful operating system, which is used in common by a number of the supplier's clients. The contract should allocate the responsibilities to ensure a proper flow of operations. Another important element that must be included in an agreement is a specification of the system's capacity. A system should have room to grow as the user's needs expand, without having to replace the system or otherwise spend unreasonable amounts of money and time.
- Software development: Specifications governing the development and creation of new software are often the most critical part of any technology transfer agreement. There are many factors to be addressed in contracting for software development, including software functionality, implementation schedules, acceptance testing, trial periods and payment schedules. At the outset, the agency's specific needs and requirements, such as data analysis, data processing and output must be specified to ensure both parties clearly understand their duties.
- Anti-vaporware protection: Vaporware can be defined as software or another computer product that is promised but never delivered. To protect against losing money or time because of vaporware, the parties should identify where products stand in the development cycle: designed, coded, built out, alpha tested, beta tested or in production. In addition, the agreement should set forth contingency plans if the products are never developed or if they fail to satisfy the stated specifications.

21.11 PBC and SLA post-award management

Always manage and monitor the supplier's performance. Management starts with the performance and incentives structure. It is recommended that an agency maintain a team- based management approach to PBC and develop a structured means and capacity for collecting, analyzing, validating and reporting performance information in accordance with the contract's requirements. An agency may obtain an objective third-party independent validation and verification (IV&V) resource for this purpose, if so, stated in the solicitation.

When changes occur be sure to follow documented change management procedures, including any SLA revisions, from the kick-off meeting, through the transition period and roll-out. The agency should benchmark and compare while continuously pushing the supplier for improvement and savings and/or exercising the established corrective action and escalation mechanisms when the supplier's

performance is non-conforming.

For more information how to develop service level agreements (SLAs) for the procurement of IT goods and services, please see the Performance Metrics Tool here: https://www.vita.virginia.gov/procurement/policies--procedures/procurement-tools/.