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# DRAFT

# Performance Based Payments Guide

## The Better Buying Power Initiative

This guide provides assistance to users based on lessons learned over the past fifteen years in contracting of Performance Based Payments.



## Table of Contents

<b>Title</b>	<b>Page</b>
Introduction	2
Chapter 1. Contract Financing Basics – FAR Part 32	3
Chapter 2. Performance-Based Payments (PBPs) Basics	5
Chapter 3. Why Use PBPs? Expected Advantages	6
Chapter 4. Determining When PBPs Are Practical	9
Chapter 5. PBP Planning	11
Chapter 6. Identifying PBP Events	13
Chapter 7. Establishing Completion Criteria For PBP Events	15
Chapter 8. The Importance of the Expenditure Profile	17
Chapter 9. Establishing PBP Event Values	19
Chapter 10. Cost Limitation Language	22
Chapter 11. PBP Contract – Special Provision	25
Chapter 12. Processing PBPs	26
Chapter 13. Contract Changes and Modifications	27
Appendix:	
A. PBP Evaluation Checklist	

## **Introduction**

Although Performance Based Payments (PBPs) have been authorized for use as a type of customary contract financing since 1996, most contracting and acquisition professionals are not familiar with the steps necessary to create an effective PBP arrangement. Unlike progress payments which are incorporated by simply including the appropriate clause, PBPs require considerable thought and effort on both sides to construct the detailed PBP arrangement that will be documented in a special provision in the contract. The purpose of this guide is to provide assistance to users based on lessons learned over the past fifteen years. It is important for users to read the entire guide because of the inter-relationship of the topics covered.

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## CHAPTER 1

### Contract Financing Basics

Since Performance Based Payments (PBPs) are a form of contract financing it is important to understand the Federal Acquisition Regulations (FAR) requirements and guidance regarding contract financing.

#### What is Contract Financing?

Contract Financing is covered in FAR Part 32 and is defined as the Government authorized payment of funds to the contractor prior to acceptance of supplies or services by the Government. Contract financing does not include invoice payments, payments for partial acceptance or lease or rental payments.

Payments of invoices on cost type contracts are not considered contract financing. Therefore contract financing only applies to fixed price contracts.

#### Purpose and Scope of Contract Financing

The purpose of contract financing is to assist the contractor in paying costs incurred during the performance of the contract. FAR 32.104(a)(1) states that when contract financing is provided it **should be provided only to the extent actually needed for prompt and efficient performance.**

#### Order of Preference

It should be noted that in the FAR 32.106 order of preference for contract financing below, the first preference is that no Government financing be provided and that the contractor obtain private contract financing without Government guarantee. It should also be noted that except for two certain situations involving non-profit educational or research institutions or the management and operation of Government-owned facilities, advance payments are the least preferred method

- (a) Private financing without Government guarantee.
- (b) Customary contract financing other than loan guarantees and certain advance payments (see FAR 32.113).
- (c) Loan guarantees.
- (d) Unusual contract financing (see FAR 32.114).
- (e) Advance payments (see exceptions in FAR 32.402(b)).

From a business perspective, the FAR order of preference is entirely logical. Any prudent buyer would prefer to pay the seller only upon delivery. Payment only upon delivery is less costly and less risky for the buyer and provides the maximum motivation for the seller to deliver the item or service as soon as possible. Likewise, the least preferred method is advance payments where the Government pays in advance of work being accomplished. These basic business concepts are important to keep in mind in any discussions of financing in general and PBPs in particular.

Although the first preference is that no Government contract financing be provided, the Government provides contract financing on the vast majority of fixed price, non-commercial contracts when deliveries are scheduled to begin six months or more after contract award. FAR states that the need for contract

financing is not to be considered a handicap for contract award. When financing is provided it is almost always in the form of customary contract financing.

### Customary Contract Financing

FAR 32.113 describes what can be considered to be customary contract financing methods for various types of goods and services.

The financing method most commonly used to date has been customary Progress Payments based on cost which is covered in FAR Part 32.5.

Performance-Based Payments (PBPs) are also a customary form of contract financing and are covered in FAR Part 32.10.

FAR Part 32.1001 states that PBPs are the preferred Government financing method *when*

- 1.) *the contracting officer finds them practical and,*
- 2.) *the contractor agrees to their use.*

It is important to note that PBPs are only the preferred method when they are deemed practical by the contracting officer. FAR implicitly recognizes that PBPs will not be practical for all contracts.

### A Contract Cannot Use Both Progress Payments and PBPs

A contract (or individual order under an indefinite-delivery contract) can use either Progress Payments or PBPs but not both. A contract or individual order cannot use progress payments for one line item and PBPs for another. However, a contract or individual order can be modified to change the contract financing method from Progress Payments to PBPs but both types cannot be used at the same time.

### Changing Financing Methods

Remember that when a contract financing method is changed to a method that is more favorable to the contractor, adequate new consideration is required under FAR Part 32.005.

## CHAPTER 2

### PBP Basics

#### What Are PBPs?

PBPs are financing payments based upon the achievement of specific events or accomplishments that are defined and valued in advance by the parties to the contract.

PBPs are:

- a customary method of contract financing
- fully recoverable in the event of default

PBPs *are not*:

- payment for accepted goods or services
- payments for partial deliveries
- an incentive arrangement

Per the FAR, PBPs can be made on the basis of performance measured by objective and quantifiable methods, accomplishment of defined events or other quantifiable measures of results. For ease of understanding, this guide will refer to “events” as the basis for PBPs

PBPs can be established on a whole-contract or a line item basis. When established on a line item basis, each PBP event must be associated with a specific line item.

#### PBP Limitation

Total PBPs on a contract *cannot exceed 90% of the contract price*, if on the whole contract or 90% of the line item price if on a line item basis. It is important to note that 90% is the maximum that can be provided and not the default level of PBP financing. In order to establish PBP financing, the parties must identify and agree upfront on what events will be used to indicate true progress, how their accomplishment will be determined and what financing value each will have. The events, completion criteria and financing values must be clearly identified in the contract. Therefore PBPs require considerable upfront time and effort on both sides. Also, because PBPs require verification of event completion prior to payment, they require administrative effort during contract performance.

## CHAPTER 3

### Why Use PBPs? Expected Advantages

When PBPs were first introduced a number of potential advantages were cited:

- enhanced technical and schedule focus,
- reduced cost of oversight,
- broadened contractor participation and
- potentially improved cash flow for the contractor.

Some of the advertised advantages have turned out to be overstated, unrealized or not measurable. Fortunately, the potential for improved cash flow has proven to be real and provides a unique opportunity for a financial win-win deal to be negotiated. Before discussing the win-win opportunity in detail, a discussion of the other expected advantages follows.

#### Expected Advantage: Enhanced technical and schedule focus

The expectation was that PBPs would enhance the focus on technical and schedule performance because of the upfront effort needed to establish a PBP arrangement and the attention required to accomplish the PBP events during contract execution. When structured properly, PBPs can reinforce the contractor's motivation to accomplish the entire effort in a prompt and efficient manner. However, if the PBP schedule is made up of less meaningful events or events have inadequate completion criteria or the valuation of events is not reflective of their relative value to the successful performance of the contract, the PBP arrangement can unintentionally misdirect the contractor's focus. DoDIG report D-2003-106, 25 June 2003 on the department's administration of PBPs cited numerous instances where the PBP arrangement contained these types of deficiencies.

#### Expected Advantage: Reduced Cost of Oversight and Administration

The expectation was that since PBP event values are established upfront, PBPs would not require the oversight of the contractor's accounting system on the part of the Government. The expected benefits of this did not consider that oversight of a contractor's accounting system is done on the system as a whole and is not contract specific. Therefore, unless a contractor had no other contracts which required an accounting system deemed adequate by the Government (such as cost type contracts or contracts that use progress payments), PBPs did not result in a reduction in the oversight of the accounting system. The vast majority of contractors who have been awarded contracts with PBP financing have contracts that continue to require oversight of their accounting system. Since PBPs require significant effort prior to award and validation of event completion during contract performance, expectations of reduced cost of administration may have been overstated.

### Expected Advantage: Broadened Contractor Participation.

The expectation was that the availability of PBP financing would attract contractors who, due to the lack of an adequate accounting system, would not otherwise seek Government contracts. There does not appear to have been a significant increase in the defense industrial base as a result of PBPs. This is understandable. Existing companies engaged in only non-Government work are generally providing commercial items or services. When the Government wants to acquire those items or services it can do so under FAR Part 12 and use commercial financing methods as described in FAR Part 32. When contemplating the use of PBPs with an existing defense contractor, this potential advantage is not applicable.

### Expected advantage: Potentially Improved Cash Flow for the Contractor

The one advantage that has been realized is the potential for improved contractor cash flow with PBPs versus progress payments. As noted above, total PBPs can equal as much as *90% of the contract price* whereas progress payments are 80% of contract cost for large businesses. Previous guidance considered this to be an advantage only to the contractor and to a large extent only the contractor has reaped the benefits to date. However it is the improved cash flow which creates the potential for a true Win-Win financial arrangement for both sides to be negotiated when PBPs are structured properly. It is primarily this potential for a win-win financial arrangement that should make PBPs desirable to both sides as explained below.

### Win-Win: Lower Price in Exchange for Better Cash Flow

The benefit of improved cash flow is so significant from a contractor's perspective that a contract with considerably less profit (lower price) with PBPs can be a better financial deal for the contractor than a higher price for the same contract with progress payments.

The key to this opportunity for a win-win deal is in understanding the time-value of money in measuring the cost to the Government and benefit to the contractor of improved cash flow. If both sides had the exact same view of the time-value of money, a win-win associated with improved cash flow would not be possible. Fortunately, the time-value of money to the contractor is considerably greater than the time-value of money to the Government.

As stated in FAR 32.1004(b)(3), there is a cost to the treasury of providing contract financing to the contractor as the Government must obtain and provide the funds in advance of receiving the final goods or services. Similarly, absent Government financing, a contractor must use its own funds to pay the entire contract cost incurred prior to delivery and there is a cost to raising those funds. The Government's cost of raising funds is based on what it costs the Government to borrow money.

The contractor, on the other hand, is generally a publicly held corporation that raises funds through borrowing (debt) and selling stock (equity) and therefore must consider both methods in determining its cost of raising funds which is commonly referred to as the corporation's Weighted Average Cost of Capital (WACC). The Government's cost of borrowing and the contractor's WACC are expressed as an annual percentage rate.

These respective percentage rates represent the time-value of money to each side. A contractor's WACC is usually much higher than the Government's cost of borrowing. This difference in the time-value of

money means that accelerated funding provided by PBPs has greater financial benefit to the contractor than cost to the Government and sets the stage for the negotiation of a mutually beneficial and lower contract price.

### The PBP Analysis Tool

The cost and benefits of a series of cash flows is not difficult to measure using the financial functions available in electronic spreadsheets. Therefore it is possible to compare the financial cost and benefits of PBP financing versus customary progress payments.

The progress payment scenario is used as the benchmark for determining a Win/Win arrangement for several reasons. First, it is the financing method most likely to be used if a PBP arrangement cannot be agreed to or is determined to be impractical. Second, it is the financing method most commonly utilized between the Government and Industry. And third, it is considered by industry to be a low-risk form of financing. For these reasons, the progress payment scenario is the right financial benchmark for a risk/reward analysis.

What is more difficult to evaluate is the potential risk associated with PBPs that is not present with progress payments. With PBPs a payment is only made when an event has been successfully accomplished. Therefore, a contractor will not be interested in a PBP contract price that is so much lower than the price would be with the less-risky progress payment method that the financial value of both is the same. The key then is to negotiate a price that is lower than it would be with progress payments, provides the contractor better financial value and recognizes the potential risk inherent in PBPs.

The DoD PBP Analysis Tool allows the contracting officer to identify that win-win solution. It does this by comparing the expected monthly cash flow to the contractor when using PBPs versus progress payments. The tool calculates the final cost to the Government and the financial value to the contractor under both scenarios. The final cost to the Government adds the cost of borrowing the financing payments to the contract price. The financial value to the contractor is based on calculating the Internal Rate of Return (IRR) and Net Present Value (NPV) value of the cash flows. The tool finds the solution that benefits both parties: lower final cost to the Government and greater IRR and NPV for the contractor. More importantly, the tool allows the user to do “what-ifs” on PBP event timing to see the financial impact to the contractor and Government of event slippage or acceleration. This permits the user to make a fact-based assessment of the financial risk and benefits of the PBP arrangement.

## CHAPTER 4

### Determining When PBPs are Practical

#### General Considerations:

Customary contract financing to large businesses may be provided on contracts valued at \$2.5 million or more where deliveries will not begin until six months after contract award. In determining whether or not PBPs are practical for use on a contract, the contracting officer should first consider whether the benefits associated with PBPs outweigh the time and effort required to establish and administer them. Therefore smaller contracts are generally not good PBP candidates as the administrative effort can easily exceed any financial benefits attained.

Since PBPs require agreement by both parties on all aspects of the arrangement, if difficulties arise in selecting events, defining measures or means of confirming their accomplishment, or deciding on the valuations, this should raise concern about whether PBPs are practical for use on the contract. Obviously, the inability to come to agreement on any of these makes the use of PBPs impossible on that contract.

The following are some of the things to consider in deciding whether PBPs are practical for a particular acquisition situation

#### Production Contracts

The ideal candidate for PBPs is a mature and stable production program where the fabrication, assembly and test processes are well established. Ideally the contractor will have already completed one or more production lots. This should permit events and their timing to be easily identified. Furthermore, the actual cost by month on the prior contracts should make the financing need at each event easier to determine.

Initial production contracts will not provide the same level of confidence in the timing of events or the cash flows needs driven by those events. Therefore more effort will be required to identify events, establish completion criteria and value events but PBPs can still be practical for most initial production contracts.

#### Service Contracts

It is less likely that PBPs will be practical on fixed price contracts for services. Unlike production contracts that normally provide opportunities for numerous objective events such as receipt of materials and completion of subassemblies or stages of manufacturing, service contracts usually involve fewer and less objective milestones.

#### Development Contracts

When a fixed price contract (FPIF or FFP) is considered proper for development, there can be a number of significant events that are PBP candidates. For instance, in an Engineering and Manufacturing Development (EMD) contract, the major activities will be toward completion of the design as evidenced by the Preliminary Design Review (PDR), if not already accomplished in the Technology Development phase, and the Critical Design Review (CDR). Clearly PDR and CDR are important milestones in the EMD process but the criteria

for successful completion of each can be problematic. A PBP event or milestone should always be associated with the completion, not the initiation of the event or milestone. In the case of PDR and CDR, the resolution of action items that originate during the review process are critical to the ultimate success of the review. For this reason, the initiation of a PDR or CDR should not be used as the event criteria. However, from a contractor's perspective, resolution of action items is not always a simple process of objective verification and always involves some level of further review by, and coordination with, Government personnel which makes the timing of the successful completion of the event more difficult to predict. Prior to a PDR the most common event candidates are associated with the submission of various plans which may also be CDRL deliveries on the contract. The significance, timing and relationship of these events to cash flow needs is not always easy to assess. As noted earlier, the linking of cash payments to specific events will inherently focus the contractor's attention to the earliest completion of those events. Therefore, especially in contracts for development, care must be taken in the identification of events and the associated completion criteria that the contractor is not unintentionally being motivated to sacrifice quality so as to receive financing payments sooner. Another complicating factor in the use of PBPs on a development contract is the difficulty in determining the reliability of the expenditure profile since there will not be a history of expenditures on a prior contract for the same effort.

#### Undefinitized Contract Actions (UCAs)

Although PBPs are not prohibited during the UCA phase it is recommended that the UCA be awarded using progress payments and PBPs be considered during the price definitization process. The same factors that cause both parties to delay the definitization of price, affects the ability to establish PBPs during the UCA period. In addition, the first few months of a contract often do not provide meaningful or objectively measurable PBP events. Providing progress payments during the UCA phase will provide the contractor adequate contract financing during this phase and allow the parties time to appropriately define the PBP arrangement prior to definitization.

#### Competitive Solicitations

Although PBPs are not prohibited in competitive solicitations they are likely to require significant discussions between the Government and each offeror in order to reach agreement on the PBP events, completion criteria and valuation. Therefore it is recommended that the solicitation state that proposal pricing and contract award will be based on customary progress payment financing but the Government will be willing to modify the contract with the successful offeror to utilize PBPs if they are determined to be practical by the contracting officer, the contractor agrees to their use and adequate consideration is received by the Government.

## **CHAPTER 5**

### **PBP Planning**

PBPs cannot be placed on contract by simply selecting a prescribed FAR clause. PBPs require significant time and effort upfront on both sides to successfully implement.

A PBP arrangement, like all elements that affect price, will not be finalized until completion of negotiations but the parties should never wait for the start of negotiations, to begin the PBP process. Doing so can significantly delay the completion of negotiations and render PBPs impractical to implement at that time.

If the contractor intends to request the use of PBPs, he should inform the Government as soon as possible before submitting a proposal so that preliminary discussions can begin and the Government can explain what information it will require from the contractor. It is most common for the contractor to propose a complete PBP arrangement with proposed events and timing, event completion criteria and event values as the starting point for discussions.

It is recommended that the RFP direct the contractor to provide the proposed PBP arrangement as part of the cost proposal submission.

Even when the contractor has proposed a PBP arrangement, it is important for both parties to understanding the steps needed to be taken and the personnel and organizations that will be involved in the PBP process.

#### PBP Steps

1. Identify PBP events
2. Establish Completion Criteria for Each PBP Event
3. Obtain and Evaluate the Contractor's Expenditure Profile
4. Establish PBP Event Values
5. Incorporate the PBP Arrangement Into the Contract via Special Provision

Each of these steps will be addressed in detail in the following chapters.

To assist the Government in the evaluation of PBPs, a PBP Evaluation Checklist is included in Appendix A.

#### Contractor Personnel

The contractor will need involvement of contracts, program management, technical and financial personnel.

#### Government Personnel

Like the contractor, the Government will also need involvement of contracts, program

management, technical and contract pricing personnel. However, in addition to these “in-house” resources, the Government will likely need support from the following organizations:

Defense Contract Management Agency (DCMA)

If DCMA will administer the contract their involvement should be considered mandatory. In-plant DCMA personnel should have first-hand knowledge of the contractor’s processes which can be extremely valuable in the identification of valid PBP event candidates and the associated completion criteria. It is critical that PBP completion criteria be clearly understood by those administering the PBPs, including the Administrative Contracting Officer (ACO)

Defense Contract Audit Agency (DCAA)

DCAA involvement may be necessary in evaluating the reasonableness of the contractor’s proposed expenditure profile.

Defense Finance and Accounting Service (DFAS)

Since DFAS is responsible for the actual payment of funds to the contractor it is important to consider particular DFAS requirements or special instructions when planning a PBP arrangement. Anytime multiple fund citations will be involved, special instructions are probably required. Any DFAS payment issues should be addressed upfront to avoid unnecessary delay in paying the contractor for completed PBP events.

## CHAPTER 6

### Identifying PBP Events

On larger contracts an Integrated Master Plan (IMP) and Integrated Master Schedule (IMS) may be required by the contract. An IMP is an event-based plan that can be the first source for potential PBP events. The IMS provides a more detailed calendar-based schedule for the tasks needed to be accomplished for each IMP event. The IMS will identify the expected timing of PBP events selected. Being more detailed than the IMP, the IMS is also a source of potential PBP events. Although an IMS is continually updated over the life of performance, the IMS as it exists at the time of PBP event selection is still the best source for event timing. IMP and IMS are very important in the earlier phases of a program. As a program matures into full production, a formal IMP and IMS may not be as important as the manufacturing processes and material need dates become established. Even if a formal IMP or IMS is not required by the contract, a contractor must have a plan of what tasks need to be accomplished and the optimal sequence of performing those tasks. It is recommended that DCMA be contacted to help identify appropriate PBP events.

Virtually every significant program (whether it entails producing an item, providing a service, or conducting research) has a plan identifying the steps that will have to occur in order for the overall effort to be successfully completed. Thus, the initial set of candidate events that can be used for PBP purposes should not require the creation of steps not already set forth in the program's planning documents. In exceptional circumstances, some PBP-unique events may have to be identified, but this should be a rare situation and every PBP event must represent work already required under the contract.

Selecting the payment events requires serious discussion between the parties. While all events to be used for PBPs need not be on the "critical path" of the overall program plan, each event should be or represent a meaningful and essential step in successfully executing the work called for by the contract or the line item to which it relates.

PBP events can be of two kinds: severable (i.e., stand-alone) or cumulative (i.e., dependent). A typical set of PBP events will contain both kinds:

Severable events do not require the accomplishment of any other events. They are stand-alone events.

Cumulative events require the prior or concurrent completion of other events in order to be successfully accomplished.

In determining event frequency and valuation, the contractor's expected cash flow needs, should be the determining factor. Another benefit of the PBP Analysis Tool is the ability to assess the financial impact of including or excluding any event. Keep in mind that the greater the number of events, the greater the administrative effort that will be required on both sides.

It will not be uncommon for the program schedule to reveal that some months have no acceptable PBP events while other months may have more than one acceptable PBP event scheduled.

Although the contractor cannot be paid more frequently than once per month with PBPs, the PBP payment in a month can be for the completion of multiple events.

In no case, however, should the parties select PBP events that do not require meaningful effort or action. PBP events should not be established solely to provide monthly cash flow opportunity. In those situations where there are few valid PBP event candidates and the time between events is lengthy, the use of PBPs is not advisable. FAR 32.1004(a)(1) states that the signing of contracts or modifications, the exercise of options, the passage of time, or other such occurrences do not represent meaningful efforts or actions and **shall not** be identified as events or criteria for performance-based payments. Also, PBPs are not to be provided as payment for accepted items, although it may be appropriate for a subcontract delivery to result in a prime PBP payment.

It is not uncommon for a contract to contain ample PBP events but few or none in the first few months of the contract. Fortunately, when significant accomplishments are not present in the first few months, the contractor's expenditures also tend to be relatively low. If needed to provide some cash flow to the contractor, a less significant event may be utilized as long as the value of the event is commensurate with its programmatic significance. For example, early effort in a production contract will often be associated with the ordering of material and parts from suppliers. While the ordering of parts does not indicate nearly as much progress as the receipt of or kitting of parts for assembly, it may be used as an early PBP event if there are no more meaningful events in that time period. This assumes there is a genuine cash flow need at that time as determined by the evaluation of the contractor's expenditure profile and as validated by the PBP Analysis Tool. Establishing the amount assigned to PBP events is covered in Chapter 9.

## CHAPTER 7

### Establishing Event Completion Criteria

Once the candidate events have been selected, it is essential to define them as clearly and precisely as possible so that their accomplishment can be objectively determined. Ideally, the definitions of these events and the measurements or other indicators to be used to determine their achievement should be such that there can be no argument or uncertainty about whether they warrant making a PBP. All completion criteria should specify Government verification before payment can be made.

The use of objective measures is the preferred course of action here. Objectivity and clarity, in both event definition and in how accomplishment will be determined or measured, cannot be overly stressed. Remember, in order for PBPs to be used, the contracting officer must find PBPs to be practical and the contractor must consent to their use. Thus, it is essential that the parties arrive at clear definitions, agree on measurements to be used, and have a consistent bilateral understanding of what is expected in order to qualify for payment.

Generally it is not a good idea to define a PBP event as the start of an effort such as “begin testing”. Events can be initiated prematurely only to be halted due to problems and subsequently re-initiated upon resolution of the problems. A valid “entry event” must have definite “entrance criteria” that requires the successful completion of other events or tasks deemed necessary to begin the event process. If such an event refers to completion of another PBP event or events it must be identified as a cumulative event. However, in addition to the predecessor PBP events, any additional tasks which are required to be successfully performed before beginning an “entry event” must be captured in the entrance criteria which must be satisfied to trigger the payment.

DCMA can be particularly useful in providing unique insight into the contractor’s established work methods and quality processes. To the greatest extent practical you would want to use events and criteria already established in the contractor’s normal business practices.

#### What is “Completion,” and Is There Any Flexibility?

In some cases, while a “good” PBP event may be clearly identified and adequately defined, there may be room for interpretation concerning what constitutes its completion. For example, in an aircraft production contract, one of the PBP events might be the completion of the tail section. A question could arise about whether this event has been successfully accomplished if the tail section has been finished and properly inspected but a few, low-cost rivets are missing from a small section of the skin. (This is sometimes referred to as the case of the “golden rivets.”) Has the tail section been “completed” for purposes of entitlement to payment? There is no absolute answer. If the tail section can be moved on to the final assembly area so that mating it to the main fuselage can begin, and the rivets could be installed without adversely affecting the other on-going mating effort it could reasonably be said that, for purposes of entitlement to the event payment for tail-

section completion, the event is “essentially” complete. It is not uncommon for there to be some minor level of work that is accomplished out of sequence or “out of station”, particularly in an early production environment, but it should always be the goal to minimize such work due to the adverse impact on efficiency and increased risk to the delivery schedule. The intent should not be to deny payment in instances where the uncompleted work is truly minor and can be accomplished without disrupting or affecting the efficiency of other work.

However, caution must be used not to define the event so broadly that it fails to require timely performance on the part of the contractor. For instance, defining an event as being complete when 90% of the work has been accomplished can be problematic. In fact, 5% of work uncompleted may not be minor. Sometimes completing the last 5% of an effort can require a disproportionate amount of time to complete especially when it must be accomplished out of sequence. Since the financing needs and therefore event value are based on when an event is scheduled to occur, how do you predict when 90% of an event will be accomplished? A program or master schedule will identify event completion dates not completion of 90% or 95% of the work.

### Be Aware of Unintended Consequences

Although PBPs are not incentive payments, any event that is associated with significant payment of cash to the contractor will be very important to the contractor. In the private sector, the phrase “cash is king” is often used to describe the importance of cash flow. Ideally PBPs should reinforce the contractor’s motivation to perform the effort in an efficient and timely manner in order to receive financing payments. However, inadequate completion criteria can not only render potentially excellent PBP events meaningless but have the unintended consequence of encouraging less than efficient performance on the part of the contractor.

The tail section example above is clearly a significant event and could be worth many millions of dollars on a major production program. The tendency might be to simply define the successful completion of the tail section as the arrival of that section in the final assembly area (e.g. “tail section arrives in final assembly area”). However, unless the criteria is established for when it is prudent for a tail section to be moved to the final assembly area, the opportunity to receive the payment as soon as possible can create the motivation for the contractor to move the tail section prematurely resulting in significant “out of station” tail section work to be performed in the final assembly area. Establishing PBP completion criteria requires not only a realistic understanding of the underlying manufacturing process but the financial motivations that can influence contractor behavior as well.

Remember that PBP are a means of contract financing that ties payments to progress achieved. Approving or allowing a PBP event payment to be made does not constitute government acceptance of an end-item.

Finally, the individual responsible for administering the PBP schedule, e.g. ACO, should be contacted in advance to review the completion criteria and ensure there are no issues from an administrative standpoint.

## CHAPTER 8

### The Importance of the Expenditure Profile

Since the purpose is to assist in the payment of contract costs, and the PBP amounts for each event will be established upfront, it will be important to obtain from the contractor an expenditure profile of the contract cost expected to be incurred by month.

The expenditure profile represents the expected financing need over the life of the contract. The contractor should be prepared to explain and support how the monthly expenditures were estimated. The Government must evaluate the expenditure profile for reasonableness. DCAA may be able to provide assistance in the review of the expenditure profile.

**An expenditure profile is not the same as a Termination Liability schedule or profile.** Termination liability will always be greater than expenditures early in the program as it reflects what future costs the contractor would be responsible for in the event of a contract termination at any point in time. The contractor needs financing to cover expenditures, not termination liability.

Keep in mind that history has shown that predicting monthly expenditures with any precision is extremely difficult unless there is actual history on prior contracts for the same item. This lack of precision is irrelevant when using progress payments as they are based on actual cost incurred each month and not a forecast of monthly costs. However, when using PBPs, the accuracy of the expenditure profile can significantly affect the reasonableness of the entire PBP arrangement.

#### Evaluating the Expenditure Profile

When the contract is for production and the contractor has produced the same item under prior contracts, the contractor should be able to demonstrate the reasonableness of the proposed expenditure profile by providing the actual cost by month on each contract. A stable production program with established material lead times and manufacturing processes should exhibit a fairly consistent expenditure profile from one lot to the next (e.g. 10% of total contract costs incurred in first 6 months, 25% by month 12 etc). On any follow-on production contract, under the Truth in Negotiations Act (TINA), the Government would be entitled to the actual cost on prior contracts as cost or pricing data on the pending contract to help determine the reasonableness of the proposed costs. Obtaining the actual cost by month on those contracts will allow the contracting officer to also determine the reasonableness of the expenditure profile on the pending contract.

When there are no prior contracts for the same or similar items, the reliability of the expenditure profile is harder to ascertain. The first check for reasonableness is against the contractor's cost proposal. Most cost proposals will segregate costs by contractor fiscal year which is usually the calendar year. For all cost proposals requiring certified cost and pricing data, Table 15-2 of FAR 15.408 requires the "time phasing" of contractors' cost proposals. The proposed monthly expenditures in the expenditure profile should align with the contractor's proposed cost by year. That means if the contractor proposed \$22 million in CY 2011 and \$37 million in 2012, the *cumulative* expenditure profile should total \$22 million on December 31, 2011 and \$59 million on December 31, 2012. If the expenditure profile is consistent with the proposal on a year-to-year

basis, the next step is to assess the projected monthly values within each year. Unusual spikes or front loaded expenditures within a year should be cause for concern.

As noted earlier, in the absence of an expenditure profile based on actual cost on prior relevant contracts, accurately predicting expenditures by month is very difficult for both sides even when there is a high degree of confidence in the reasonableness of the total cost. History has shown that even when expenditure profiles are consistent with the cost proposal on a year-to-year basis and monthly values appear reasonable, there is a strong possibility for the actual cost by month and by year to be significantly different from the profile even when the work is completed on schedule. When actual expenditures turn out to be incurred later than forecasted in the expenditure profile, the contractor could receive payments well in excess of his cost early in the program.

To gauge the contractor's general ability to predict the timing of actual expenditures, the contractor could be requested to provide actual vs predicted monthly expenditures on prior contracts using PBPs. In the absence of prior PBP contracts, the contractor could be asked to provide the proposed vs actual cost by year on other similar fixed price contracts. From the Government perspective, if the data shows that actual expenditures consistently occur later than predicted or proposed, there is reason to suspect that the current expenditure profile is also front-loaded.

When the Government and contractor have significant differences of opinion regarding the expenditure profile, PBP financing may not be practical.

## CHAPTER 9

### Establishing PBP Event Values.

After the parties have agreed on the events that will be used to trigger financing payments and have settled upon how their accomplishment will be measured or determined, the next critical step in the process is setting dollar or percentage values for the events themselves.

It is important to remember that the fundamental purpose of all contract financing is to assist the contractor, in the paying the cost he incurs in the performance of the contract and per FAR 32.1004(b)(2) (i), to do so **“only to the extent actually needed for prompt and efficient performance”**. Clearly the contractor can never have a “need” for more than his actual cost incurred at any point in time.

FAR 32.1004(b)(3)(ii) states that the contracting officer must ensure that PBPs **“are not expected to result in an unreasonably low or negative level of contractor investment in the contract”**. FAR does not define “unreasonably low” level of contractor investment but it is clear that PBPs are not intended to result in the Government funding all contract costs as they are incurred throughout the contract. The prohibition against “negative level” of contractor investment means that PBPs must not be structured in such a way as to become equivalent to advance payments. Too often this language is ignored and the FAR 32.1004(b)(2)(ii) language that states that PBPs *cannot exceed* 90% of the contract or delivery item price is viewed incorrectly as specifying that PBPs should always equal 90% of price. Because of this, previous guidance has incorrectly advised that since contractor cost is likely to be less than 90% of the negotiated price, PBPs are likely to include profit. That guidance was incorrect because it presumed PBPs should always equal the FAR maximum threshold of 90% of price and ignored the other limiting language within FAR 32.1004.

The starting point for the valuation of PBP events should be a comparison of the evaluated expenditure profile to the schedule of PBP events by month. This is done to ensure that the event amounts are not expected to result in an unreasonably low or negative level of contractor investment in the contract. For instance, if the expenditure profile indicates that through month 3 of the contract, cost incurred is predicted to be \$7 million, and the first PBP event is scheduled to be completed in month 3, the starting point for the amount for that event would be no more than \$7 million based on the expected financing-need at that point in time.

Although the expenditure profile itself does not have to be agreed upon, significant disagreement could make it impossible to agree on event values. If the Government suspects the expenditure profile is front-loaded, it will want to assign lesser amounts to early PBP events than the contractor proposes in order to prevent an advance payment scenario. From the contractor’s perspective, if he believes the proposed expenditure profile is correct, he will view any significant reduction in the amounts for early PBP events to be unwarranted and harmful to his financing cash flow. When this situation exists, the most equitable solution will be to include language in the PBP special provision on the contract that will prevent total payments under PBPs from exceeding total cost incurred at any point in the contract. This language is discussed in more detail in the section on Cost Limitation Language section below

## “Value” of a PBP Event

In addition to the financing-need perspective, the amounts must be commensurate with the value of the performance event or performance criterion. FAR does not define “value” in this context but in order to comply with both FAR requirements on the “value” of the event it should be assumed that the amount can be less but not greater than the anticipated cost incurred at that point.

However, it is important to understand that the value of the event *is not limited to the cost of performing that specific event or task*. Otherwise, in order for the contractor to be paid all his expected cost incurred, it would be necessary to establish a PBP event for every discrete task on a contract.

Therefore, PBP events are established as representative milestones that may reflect the total effort needed to accomplish not only that particular milestone but other activities through that timeframe. For instance, while the cost of performing the specific PBP event in month 3 might only be \$200,000, it may be appropriate to value that event at the \$7 million of cost expected to be incurred by that point in time because the event is considered to fairly represent the progress achieved in the first 3 months of the contract.

The \$7 million would be the starting point for setting the amount for the event but the relative value of the event versus other events should also be considered. For instance, assume the next PBP event is scheduled to occur in month 5 and the total cost expected to be incurred at that point is \$13 million. If the first event was assigned a value of \$7 million, the maximum amount available for the second event would be \$6 million (\$13M less \$7M). What if the event in month 5 was considered to be much more significant in terms of measuring progress on the contract? In order for the amount to be commensurate with its value, it should be valued greater than the event in month 3? Since the total financing-need as of month 5 is \$13 million, the event in month 3 might be reduced to \$5 million so the event in month 5 could then be set at \$8 million. This would mean that the payment in month 3 would only provide \$5 million of the \$7 million of cost incurred. The contractor would have to accomplish the more significant event in month 5 to receive financing equal to expected total cost incurred at that time. While the contractor will certainly want to accomplish both events in a timely manner, the greater focus will appropriately be on the event with the greater programmatic significance and dollar value. In this situation the financing provided through the first event would be less than would have been provided via 80% progress payments ( $\$5M \div \$7M = 71\%$ ). However, the financial benefit provided by PBP cash flow must be assessed over the life of the contract which is what the PBP Analysis Tool does. Keep in mind that every event does not need to be precisely valued relative to all other events but care should be taken to ensure that there is reasonable consistency in event valuation so that the contractor’s financial focus is in basic alignment with programmatic priorities.

## Special Considerations with Severable Events

Severable events are payable whenever accomplished, and those events are usually subject to the most variability as to when they will actually occur both in time and the expected sequence of events. Because the amount assigned to each event is more than the cost of performing the specific event and is based on when it was expected to occur, early performance of the event can result in an advance payment scenario. While it is generally in the Government’s best interest for the contractor

to complete all tasks and deliver the end item or service ahead of schedule, PBPs are not to be used as an incentive for exceeding the contract requirements. Furthermore, accomplishing a severable event ahead of schedule may have no beneficial impact on the delivery date. For example, a PBP event may be established for the “ordering of parts” in month three of the contract based on the need for the parts later in the production process. Ordering the parts early may not expedite the production process at all. Furthermore, if the event is valued based on an expenditures expected to occur through month three, early performance of the event may only result in paying the contractor for the cost of other activities that have not been performed yet.

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## CHAPTER 10

### Cost Limitation Language

FAR requires contracting officers to ensure that PBPs “are not expected to result in an unreasonably low or negative level of contractor investment in the contract”. Although the FAR language refers to expectations at the time of award, it is recommended that the language below be included in all PBP contracts and should be considered mandatory for all Fixed Price Incentive Firm-Target (FPIF) contracts.

“At no time will cumulative performance-based payments exceed cumulative cost incurred on this contract.”

This language is appropriate for two reasons:

First, financing is to be provided only to the extent actually needed. There can never be a “need” for financing payments to exceed cost incurred. This language only prevents the contractor from receiving the equivalent of advance payments either intentionally or unintentionally. It is never the intent for PBPs to result in advance payments.

Second, situations can arise that make it extremely difficult to comply with the FAR requirement even as it applies to expectations for a PBP arrangement.

For instance, the parties may disagree over the reliability of the expenditure profile or the timing of events. When this occurs, the Government may expect that the contractor’s PBP event amounts and schedule would result in the contractor being paid more than his cost incurred early in performance (i.e. a negative level of contract investment). The contractor may believe strongly that this would not occur. The Government can’t agree to the contractor’s arrangement and comply with FAR. The contractor may view the Government’s position as being less advantageous than progress payments. If agreement on PBP events and values cannot be reached, PBP financing cannot be used.

The cost limitation language above ensures that the contractor will not have a negative investment at any point in the contract but it does not ensure that the contractor will not have an “unreasonably low” level of investment. However, the protection provided by this language can permit the Government more flexibility in negotiating PBP event values and can permit agreement closer to the contractor’s position. It does not however relieve the Government from the responsibility to evaluate the expenditure profile, PBP events, event timing or completion criteria.

Even in situations where the Government and contractor consider the expenditure profile and timing of events to be reasonable, a negative investment or advance payment scenario could occur in the absence of the cost limitation language.

If the contractor performs events ahead of schedule, an advance payment scenario could result. There is generally a greater risk of this occurring with severable events. Since event values are based on more than the cost of performing the specific event or task, when an event is accomplished earlier than expected it does not necessarily mean the other non-event costs are incurred earlier. The result can be the contractor being paid considerably more than his cost incurred prior to delivery.

The contractor could underrun the contract cost considered negotiated. Since the expenditure profile and event values were based on the negotiated cost, at some point PBPs would exceed cost incurred resulting in payments in excess of cost incurred prior to delivery. In a Firm-Fixed Price contract, every dollar of underrun eventually becomes additional profit earned by the contractor at contract completion. Under progress payments, an underrun could never result in an advance payment scenario because the contractor is paid a set percentage of the actual cost each month. For example, assuming a \$100 million contract price, a negotiated cost of \$90 million and an 80% progress payment rate, if the contractor achieved the negotiated cost the contractor would receive \$72 million ( $\$90M \times 80\%$ ) in progress payments and the remaining \$28 million only upon delivery. If the contractor were to underrun the negotiated cost by \$10 million, he would receive \$64 million ( $\$80M \times 80\%$ ) in progress payments and the remaining \$36M only upon delivery. Under progress payments the contractor is appropriately provided all profit earned, but only upon delivery, not as part of contract financing. Since PBPs are a type of contract financing, payment of profit is still only appropriate upon delivery.

The cost limitation language should always be used on Fixed Price Incentive Firm (FPIF) contracts due to the possibility of a cost underrun. When a contractor underruns the negotiated Target Cost on a FPIF contract, both sides benefit by the underrun. The final price to the Government becomes less than the Target Price based on the Government's underrun share ratio. Since PBPs are established based on the Target Price, it creates the possibility that the total value of PBPs could exceed the final price to be paid by the Government. Clearly this is an unacceptable situation and one that can never happen with progress payments since those payments are based on actual cost incurred. The cost limitation language ensures that PBPs never exceed cost incurred and therefore never exceed the final price to the Government.

#### How the Cost Limitation Language Works

When the contractor submits his monthly request for payment for PBP events accomplished, he identifies the total value of PBP events accomplished to date *and* the total contract actual cost incurred to date.

If the total value of PBP events accomplished to date is less than or equal to total cost incurred to date, the contractor receives the full value of PBP events accomplished to date less prior PBPs received.

If the total value of PBP events accomplished to date is greater than the total cost incurred to date, the contractor receives a PBP amount equal to the total cost incurred less prior PBPs received. When the value of PBPs accomplished exceeds cost incurred, the difference is withheld but is still payable to the contractor in future months.

For example, if the cumulative value of PBPs accomplished by the end of May is \$27 million but total cost incurred through the end of May is only \$25 million, total payments to the contractor cannot exceed \$25 million and \$2 million is considered withheld. If in June the contractor completed an event valued at \$1 million but total incurred cost grew to \$28 million or more, he would be paid \$3 million (\$1M for the June event and the \$2M previously withheld).

The identification of total cost incurred does not require contractors to complete any forms or calculate estimate-at-completion as required under progress payments. The only requirement is that the contractor be able to account for the cumulative cost charged to a contract each month. For contractors who have job cost systems, this information is easily identifiable. For contractors that do not have a job cost system, equivalent data is usually available that is suitable to protect the Government's interest.

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## CHAPTER 11

### PBP Contract – Special Provision

Once the parties have agreed on the PBP events, the event completion criteria and the event values, this information must be documented in a special provision to the contract. The special provision must contain a PBP schedule which will normally be in tabular form and will contain the following fields:

Event Number

Event Title or Description

Event Value

Cumulative or Severable Event

If Cumulative, list of Prior Event Numbers

Line Item (if PBPs are on a Line Item Basis)

Fund Type

Event Completion Criteria

Some PBP schedules include the expected date of completion for each event as well.

Event numbers make it easier to refer to events especially in the case of cumulative events.

All event values must either be stated as a dollar amount or as a percentage of the total contract price (if on a total contract basis) or as a percentage of the Line Item price (if on a line item basis). All values must be stated as dollars or all values must be stated as percentages.

If the PBPs were established on a line item basis, the line item to which the event is linked must be identified.

The Fund Type is required whenever multiple fund citations are involved. Directions for DFAS on which funds to use first must be made clear in the schedule or with a footnote reference.

Event Completion Criteria may be extensive and may not be practical to include within the tabular schedule and therefore may be listed separately within the provision or be included as an attachment that is referenced in the provision. The criteria must be identified either directly or by referenced attachment in the contract.

## CHAPTER 12

### Processing PBPs

The contracting officer must determine whether the event or performance criteria for which the payment is requested has been successfully accomplished in accordance with the contract. The contracting officer shall not approve a PBP unless the specified event or performance criterion has been successfully accomplished in accordance with the contract (FAR 32.1007(d)).

Because PBP is a method of contract financing, every effort should be made to process payment requests as expeditiously as possible.

Contractor PBP requests may not be submitted more often than monthly. This does not mean, however, that a monthly request cannot cover payment for more than one payment event. Payment requests must clearly identify the event or events covered by the monthly submission and must refer to the applicable contract provision so that the amount to be paid can be unambiguously determined.

Payment requests submitted to the reviewing/approving office will be promptly reviewed and either rejected and returned to the contractor or approved and forwarded to the DFAS paying office.

#### Liquidation

PBPs are financing payments, as opposed to delivery payments. The Government recoups PBPs through deduction of liquidations from payments that would otherwise be due to the contractor for delivery of completed contract items. In the event of termination for default, any unliquidated PBPs must be returned to the government. The contracting officer must specify the liquidation rates or amounts that will apply to deliveries made during the contract period and include that information in the contract.

#### Title to Property Acquired or Produced by Contractors

Just as with traditional progress payments, when it makes PBPs, the government takes title to all property acquired or produced under the contract. The purpose of doing so is to protect the government's financial interest in the payments made prior to partial or full delivery of the goods or services called for under the contract. When the contract has been fully performed and all deliveries have been made and accepted, title to any property not delivered to the government reverts to the contractor.

## CHAPTER 13

### Contract Changes and Modifications

Once the contract's PBP structure has been established, it may become necessary to adjust it to reflect subsequent changes or contract modifications. The required adjustments can take the form of adding new PBP events or modifying the definition, value, or timing of existing events. The particular circumstances of the contract and the modification will determine which is the best method to use. In general, the parties should seek to use whichever is administratively most expedient and maintains the same win-win financial arrangement as the original contract. Because each contract's PBP structure is unique, those changes will have to be made by a contract modification.

Remember that the payment office responsible for the contract must be kept fully informed about changes to the PBP structure. Without up-to-date and complete contract information, that office will be unable to process the payments properly. Unnecessary delays in payment or erroneous payment may result if the paying office record is not properly maintained. Whenever changes are made to the contract's PBP structure, The PBP schedule in the contract must be revised and quickly distributed to all parties having a role in making or overseeing payments.

## Appendix A

### PBP Evaluation Checklist

	<b>EVENTS</b>	y/n
1	Have you obtained a program master schedule to help develop events?	
2	Do the events reflect meaningful steps in successfully performing the contract?	
3	Are the scheduled dates appropriate for the events?	
4	Have you considered the frequency of events, balancing valid contractor cash flow needs with the administrative cost of verifying event completion?	
5	Has each event been classified as either cumulative or severable?	
6	If on a line item basis, has each event been tied to a specific line item?	
7	Has DCMA (technical and ACO) been involved in developing the events?	
8	Have you verified that prime contractor deliveries <i>are not</i> listed as PBP events? (Note: it is ok for Subcontractor deliveries to the prime to trigger PBP events.)	
	<b>COMPLETION CRITERIA</b>	
9.	Do the completion criteria reflect completion of performance?	
10.	Are the completion criteria clear?	
11	Is the language readily understood? (e.g. the meaning of terms such as "initiate" is defined)	
12.	Are items specifically defined? (e.g. "critical parts" refers to a defined list of parts)	
13.	Do the criteria identify who will conduct the verification and is this the appropriate organization/position?	
14.	Has DCMA been involved in the development of the completion criteria?	
	<b>EXPENDITURE PROFILE</b>	
15.	Does the expenditure profile reflect monthly costs (no prime contractor profit)?	
16.	Is the PBP expenditure profile considered reliable? Can contractor demonstrate reliability of prior expenditure forecasts on contracts for the same or similar items?	
17.	Does it match the proposal?	
18.	Is the expenditure profile a projection of actual costs to be incurred by the prime contractor and not a termination liability schedule?	
19.	Is the profile reasonable and not front-loaded?	
	<b>EVENT VALUATION</b>	
20.	Have events been valued so that cumulative payments are never greater than the cumulative cost expected to be incurred at each event completion? Within this constraint, are events generally valued consistent with their relative importance in the overall successful performance of the contract?	
21.	Does the Contractor have an investment in the program? (Note: Profit forbearance is not an "investment.")	
22.	Did you run the DOD PBP Tool to determine appropriate consideration?	

<b>PBP CLAUSE</b>		
23.	Does the Clause provide liquidation instructions? Do liquidations tie back to CLINS?	
24.	Are events clearly labeled as severable or cumulative? If an event is cumulative, does the schedule show the events to which it is tied?	
25.	Does the PBP schedule clearly define whether PBPs are on a line item or whole "lot" basis?	
26.	Has the ACO reviewed the clause for ease of administration?	
27.	Are payment instructions clear so DFAS can readily make payment (including specific instructions if multiple appropriations are involved)?	
28.	Does the Contractor understand that DFAS will only make one payment in a month?	

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