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NAVAL POSTGRADUATE SCHOOL Monterey, California



THESIS

**PERFORMANCE-BASED PAYMENTS: WHY HAVE THEY
NOT BEEN ADOPTED AS THE PREFERRED METHOD OF
CONTRACT FINANCING?**

by

K. Eric Oetl

December 2001

Thesis Advisor:
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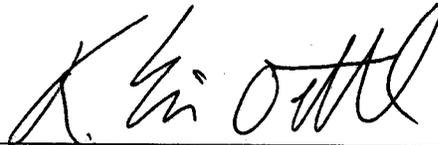
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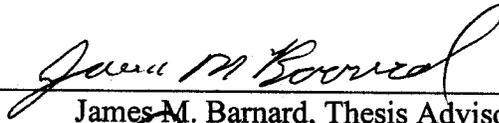
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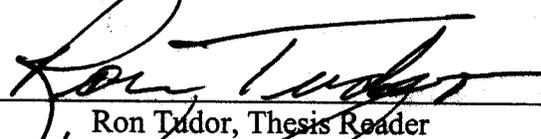


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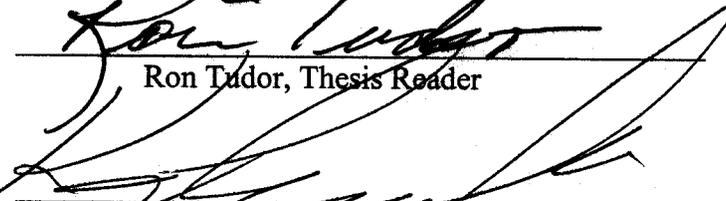
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ABSTRACT

The objective of this thesis is to provide a comprehensive analysis of the issues surrounding the use of performance-based payments as a form of contract financing and to determine the major reasons why PBP have not been readily adopted in Department of Defense (DoD) contracts. In order to fully research, analyze, and evaluate the issues surrounding PBP and the reasons why they have not been readily adopted, two separate online surveys were developed and distributed. One survey was disseminated to DoD acquisition workforce personnel such as contracting officers and program managers. The second survey was distributed to contracting, program management, and acquisition personnel within the defense industrial base. Additionally, interviews were conducted with DoD personnel and defense contractors involved with PBP. Analysis led to concluding: training in PBP is inadequate, a lack of coordination exists between the Procuring Contracting Officer (PCO) and Administrative Contracting Officer (ACO) in establishing PBP terms, the PBP payment process needs immediate improvement, and a culture change is still needed with DoD. Recommendations to expand the use of PBP are: develop a comprehensive training program on PBP, encourage the use of Integrated Product Teams (IPTs) in the PBP process, improve the payment process for PBP, and continue the strong push for the expansion of PBP usage.

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I. INTRODUCTION

A. PREFACE

For many years, the Government has had the authority to utilize performance-based payments (PBP) as a method of providing financing to contractors performing work under fixed-price type contracts and are, in fact, the preferred approach. PBP differ from traditional progress payments in that they are based on achievement of specific events or milestones, rather than the incurred costs of performance. However, even though PBP are the preferred method of contract financing, they are not nearly as prevalent in Government contracts as traditional progress payments.

B. RESEARCH OBJECTIVE

The objective of this thesis is to provide a comprehensive analysis of the issues surrounding the use of performance-based payments and to determine the major reasons why PBP have not been readily adopted in Government contracts. In identifying the root causes, this research will provide organizations and individuals with the necessary information to address the issue of PBP usage and determine appropriate strategies to ensure their implementation when appropriate.

C. RESEARCH QUESTIONS

The primary research question is: Why have Performance-Based Payments (PBP) not been readily adopted as the primary method of contract financing in the Department of Defense (DoD)?

The following secondary research questions were developed to assist in answering the primary research question:

1. What is the background and history of PBP?
2. What are the pros and cons of using PBP?

3. What is the DoD acquisition workforce's perspective of the PBP option?

4. What is the DoD industrial base's perspective of the PBP option?

D. SCOPE AND ORGANIZATION

This thesis develops a full understanding of performance-based payments and the issues associated with their implementation into DoD contracts. The scope of the thesis includes: (1) a review of the background and history of PBP; (2) an examination of the advantages and disadvantages of using PBP; and (3) an analysis of the DoD acquisition workforce and industrial base's perspective on PBP.

Chapter II provides background and historical information on PBP, including definitions of key contract financing terminology. This chapter also discusses the appropriate uses of PBP and the processes involved in their implementation.

Chapter III presents a discussion of the PBP surveys that were developed and disseminated to both Government and industry as part of the research associated with this thesis. The chapter discusses the survey objectives, demographics, and the actual survey questions.

Chapter IV presents an analysis of the numerous advantages and disadvantages of PBP. In addition, the chapter presents an examination of the PBP survey results and presents a discussion on both the DoD acquisition workforce and the industrial base's perspective on the PBP option.

The final chapter addresses conclusions, recommendations, a summary and review of the research questions and suggested areas for further research.

E. RESEARCH METHODOLOGY

The research methodology used for this thesis includes: (1) a comprehensive search and review of available literature on PBP, including books, magazine articles, Government reports, Internet-based materials and other library resources, (2) the development, dissemination, and analysis of surveys concerning PBP for both DoD

acquisition workforce personnel and contracting/acquisition personnel within the DoD industrial base, and (3) interviews of acquisition/contracting personnel both inside and outside DoD.

F. BENEFITS OF RESEARCH

This thesis is intended to provide DoD organizations and acquisition workforce personnel with information concerning the use of PBP. It is intended that the analysis and conclusions of this thesis contribute to an understanding of why PBP have not been readily adopted within DoD and that the recommendations provide a basis for improving the usage of PBP, when appropriate.

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II. BACKGROUND

A. CONTRACT FINANCING

The practical use of contract financing in Government acquisitions can prove extremely beneficial in expediting and facilitating contract performance. The Federal Acquisition Regulation (FAR) provides guidance on a variety of contract financing mechanisms available to contracting officers. The various methods are outlined in FAR 32.106 and are listed in order of preference: (a) Private financing without Government guarantee, (b) Customary contract financing, (c) Loan guarantees, (d) Unusual contract financing, and (e) Advance payments. These methods of contract financing were established to minimize the Government's financial risk. For non-commercial items, the financial risk on the Government increases from no risk (private financing) to a much larger amount of risk (advance payments).

1. Private Financing

Essentially private financing places the responsibility of financing a contract with the contractor and removes the Government from the equation. Obtaining financing for contract performance and completion is left solely to the contractor. An example of private financing is when a contractor uses a line of credit with a financial institution to finance working capital.

2. Customary Contract Financing

Many different types of customary contract financing are outlined in FAR 32.113. Each of these various methods is dependent on the type of product or service being procured and the competitive environment in which they are procured. Customary contract financing includes: (1) financing of shipbuilding, conversion, alteration or repair, providing progress payments are based on a percentage or stage of completion (2) financing of construction or architect-engineer services, (3) financing of contracts for supplies or services awarded under the sealed bid method through progress payments based on costs, (4) financing of contracts for supplies or services awarded under the competitive negotiation method through either progress payments based on costs or performance-based payments, (5) financing of contracts for supplies or services awarded

under a sole-source acquisition using either progress payments based on costs or performance-based payments, (6) financing of contracts for supplies or services through advance payments, (7) financing of contracts for supplies or services through guaranteed loans, or (8) financing of contracts for supplies or services through any appropriate combination of advance payments, guaranteed loans, and either performance-based payments or progress payments (but not both). (Ref. 1)

3. Loan Guarantees

This type of contract financing is an arrangement that carries with it the full faith and credit of the United States Government. “Loan guarantees are made by the Federal Reserve banks, on behalf of designated guaranteeing agencies, to enable contractors to obtain financing from private sources under contracts for the acquisition of supplies or services for the national defense.” (Ref. 1)

4. Unusual Contract Financing

This form of contract financing is defined as, “any contract financing arrangement that deviates from this part (Subpart 32.1 – Non-Commercial Item Purchase Financing) is unusual contract financing.” (Ref. 1) An example of unusual contract financing is when a contractor obtains a progress payment rate higher than the customary rate.

5. Advance Payments

Advance payments are defined as, “advances of money by the Government to a prime contractor before, in anticipation of, and for the purpose of complete performance under one or more contracts.” (Ref. 1) Advance payments are the least preferred of the various contract financing methods since they are not measured by performance or partial performance on a contract and should be used sparingly.

B. PERFORMANCE-BASED PAYMENT POLICY

1. History of Performance-Based Payment Policy

The Federal Acquisition Streamlining Act (FASA) of 1994 substantially changed the authority of the Government to provide contract financing. Specifically, Section 2001 of FASA revised the rules for contract financing and included guidance for the use of a new financing technique for non-commercial items that based payments on contractor performance as measured by: (1) objective and quantifiable results; (2) accomplishments

of events; or (3) other quantifiable measures of results. This new financing method was called Performance-Based Payments.

Section 2001 was finally implemented in the FAR under Federal Acquisition Circular (FAC) 90-33 which added *Subpart 32.10-Performance-Based Payments*. This addition, which became effective on 01 October 1995, provided, “the policy and procedures for establishing and administering performance-based payments,” and applied to non-commercial purchases only. (Ref. 2) However, *Subpart 32.10-Performance-Based Payments*, as revised by FAC 90-33, did not apply to the following:

- (a) Payments under cost-reimbursement contracts;
- (b) Contracts for architect-engineer services or construction, or for shipbuilding or ship conversion, alteration, or repair, when the contracts provide for progress payments based upon a percentage or stage of completion;
- (c) Contracts for research or development; or
- (d) Contracts awarded through sealed bid or competitive negotiation procedures.

Recently, changes have been implemented to the policy governing the use of Performance-Based Payments and a call for renewed attention to the use of PBP was issued.

2. Current Performance-Based Payment Policy and Guidance

The policy covering the use of PBP was most recently revised by FAC 97-16, effective 27 March 2000, which emphasized, “that performance-based payments are the preferred method of contract financing.” (Ref. 3) Additionally, FAC 97-16 removed some of the restrictions placed on the use of PBP by allowing, for the first time, their use on research and development contracts, as well as contracts awarded through competitive negotiation procedures. *Subpart 32.10-Performance-Based Payments* provides the policy and procedures for PBP and outlines the basic guidance over PBP. The policy establishes five basic points governing the use of PBP:

- (1) PBP are the preferred method of Government contract financing when the contracting officer finds them practical and the contractor agrees to their use.

(2) PBP are contract financing payments and are **not** payment for accepted items.

(3) In the event of contract default, PBP are fully recoverable in the same manner as traditional progress payments.

(4) PBP must not be used when other forms of contract financing are provided.

(5) Since PBP are contract financing payments and not payment for accepted items, they are not subject to interest-penalty provisions.

This subpart also explains that PBP are the “preferred” method of financing under the following conditions: (1) the contracting officer finds the use of PBPs practical; and (2) the contractor agrees to their use. (Ref. 1) In other words, the use of PBP requires the agreement of both the contractor and the Government. This differs from traditional progress payments, which do not require both parties to agree on their use.

C. USING PERFORMANCE-BASED PAYMENTS

The Office of the Deputy Under Secretary of Defense for Acquisition Reform (DUSD(AR)) recently published a User’s Guide to Performance Based Payments, which provides a wealth of information on PBP usage. Included in this guide is information concerning what types of contracts are best suited for PBP, insight on how best to establish PBP criteria, and guidance on the administration and processing of PBP.

1. Characteristics of Good PBP Contracts

FAR Subpart 32.10 dictates that PBP are to be used only with fixed-price contracts, but not for those fixed-price contracts awarded using the sealed-bid method. PBP may also be used on undefinitized, fixed-price contracts or contract actions. While the use of PBP has not been widespread, “the limited experience to date does indicate that certain characteristics of a contract make it a likely candidate for the use of PBP.” Generally, contracts that are good candidates for PBP have the following three characteristics: (1) the process or product is known, (2) the contractor has experience in producing the item or performing the service, and (3) the technical and financial risk is low. (Ref. 4)

It is important to realize that, while performance-based payments are restricted to fixed-price contracts, there is no restriction on whether they can be used for supplies or services. However, generally speaking, PBP seem to be more suited to contracts for supplies than for services. Quite often, service contracts provide for monthly invoicing, making the need for contract financing almost nonexistent. Contracts such as those for installation or base support rarely have a need for contract financing at all, making the case for the use of PBP essentially moot. Additionally, contract financing, such as performance-based payments or progress payments, can only be used on contracts awarded in excess of \$2 million, unless the contractor is a small business.

2. Procedures for Using Performance-Based Payments

There are three key pieces to define PBP terms: (1) the payment event, (2) the definition of successful event completion, and (3) the value of the event. All three pieces must be considered together to ensure that the contractor will have adequate cash flow, that the contractor will be motivated to perform, and that completing the events will lead to successful contract completion. (Ref. 5) Each of these three pieces presents unique challenges in establishing successful PBP terms.

a. Performance-Based Payment Events

First and foremost in defining PBP terms is the selection of payment events. These events **must** be clear, meaningful efforts or actions that contribute directly to the ultimate completion of the contract or line item to which they apply. However, it is not necessary that these events be part of the “critical path” for the overall program. There are a number of characteristics that are common to good PBP events. Events should be unambiguous milestones leading toward contract completion, represent a physical product change, show added value, and are not substitutes for costs incurred. (Ref. 5)

There are two types of PBP events, severable and cumulative, and quite often a typical set of PBP events will use both kinds: “Severable events do not depend for their successful accomplishment upon the prior or concurrent completion of any other event or action. In contrast, cumulative events require the prior or concurrent completion of other events in order to be successfully accomplished.” Additionally, there is no set

number of payment events required for using PBP. However, the number of events should be sufficient to ensure a contractor has the consistent cash flow needed during contract performance. (Ref. 4) The selection of PBP events requires serious discussion between the parties involved, as the successful completion of these events is what triggers the contract financing payment.

b. Defining Event Completion

It would seem that of the three pieces in establishing PBP terms, the definition of successful event completion would be the easiest. The event has already been selected and all that remains is to demonstrate completion. However, “the definition of what constitutes completion is the area that creates the most problems in PBPs.” (Ref. 5) Even though the parties may have developed what they consider to be a “good” PBP event, there quite often is room for interpreting whether or not an event has been completed. To combat the problems associated with what constitutes completion, it is imperative for the parties involved to address them upfront when selecting the actual PBP events.

Guidance on performance-based payments has stated that, “having some leeway in what constitutes completion for PBP entitlement is not necessarily a bad thing.” (Ref. 4) This “leeway” often reflects that the Government understands the real-world circumstances involved in the manufacturing process. It makes sense to structure PBP events and completion criteria with some amount of flexibility, so that payments can be approved when the underlying event is substantially complete and “the difference between substantial completion and total completion will not adversely affect subsequent activities.” (Ref. 4) However, it is easy to see how the Government’s interpretation of completion and that of the contractor’s can be different. This is why it is vital for the two parties to come to an agreement on what constitutes the completion of an event.

c. Valuing Payment Events

The final piece in establishing successful PBP is the process of setting values for these events. Regulations dictate that PBPs cannot exceed 90% of the contract price or the contract line item to which they apply. It is important to recall that PBP are not advance payments or incentive payments, but are merely contract financing

payments. It is, therefore, incumbent upon the Government to ensure that the value of the PBP event is commensurate with the effort completed. Event valuation should have, “some reasonable relationship to the amount of working capital the contractor will need in order to achieve the progress that they represent.” (Ref. 4) Again, the valuation of PBP events requires the coordination and agreement of both parties.

Invariably, difficulties in agreeing upon the value assigned to PBP events will arise. The Government has a fiscal responsibility to ensure that the financing payments stay within the regulated limitations. It is not in the Government’s best interest to “front-load” financing payments while staying within the statutory limits. Likewise, setting PBP event values that are disproportionately small in relation to the contractor’s actual financing requirements is not in either party’s best interest. (Ref. 4) In addition to agreeing on the value of PBP events, the parties must also agree upon the liquidation rates or amounts that will apply, in the event that a contract with PBP is terminated. Unless there are mitigating circumstances or agreements reached between the parties, it is advisable to set the liquidation rate at one that matches the relationship between the events and the contract price, generally 90%. (Ref. 4)

D. THE GOVERNMENT TEAM IN PERFORMANCE-BASED PAYMENT DEVELOPMENT

As previously shown, the most critical part of successful implementation of performance-based payments is the establishment of well-defined PBP events and criteria for performance completion. It is, therefore, essential that all members of the Government “team” are actively involved in the development of PBP terms. The Government’s team generally consists of individuals from the buying activity, the Defense Contract Management Agency (DCMA), the Defense Contract Audit Agency (DCAA), the Defense Finance and Accounting Service (DFAS), and the contractor. Key personnel from these organizations, such as the Program Manager (PM), Procuring Contracting Officer (PCO), Administrative Contracting Officer (ACO), technical and logistics specialists/managers, and others, will collaborate and jointly develop the PBP plan.

One of the most important relationships on the Government’s team is the one that exists between the buying command and DCMA, specifically between the PCO and

ACO. Both the PCO and the ACO play significant roles in the PBP process and each is dependent on the other for the successful execution of the payments. While it is the responsibility of the PCO to establish and agree on the PBP terms, close coordination with the ACO is critical. Guidance in the User's Guide encourages PCOs, "to seek the input of DCMA" when establishing PBP terms and that DCMA's, "experience and familiarity can be a valuable asset for the contracting officer and the program office when selecting and defining appropriate PBP events." (Ref. 4) The PBP process requires significant effort by both the PCO, in planning for PBP usage, and the ACO, in administering and processing PBPs, their close coordination cannot be overemphasized. Nevertheless, the decision to include the ACO in the pre-award phase of the contract still rests with the buying command and significant problems in the PBP process have had their roots in the disconnect between ACO and PCO.

The decision to use this form of contract financing requires more up-front effort on the part of the Government team. Unlike traditional progress payments, which can be implemented by the simple inclusion of a contract clause or provision, PBP require the contractor and Government to negotiate the trigger events, completion criteria, and event valuation. Sufficient time must be allocated during the pre-award phase if the use of PBP is to be successful. The failure of the Government's team to adequately address the issues surrounding the establishment of PBP terms, the more likely the contract financing payments will be bogged down and delayed by administrative difficulties.

E. GOVERNMENT – CONTRACTOR INTERACTION

Another aspect of PBP that is extremely critical to their success is the interaction between the contractor/offeror and the Government. Since, the establishment and use of PBP requires the negotiating and agreement of both the Government and contractor on payment events, completion criteria and valuation, an early open dialogue between the two parties can alleviate future problems. One of the attractive features of PBP is the ability of potential offerors to propose the use of PBP, even if they are not initially included in the solicitation. In fact, contracting officers are "encouraged to allow offerors to have the option to propose the use of PBPs". (Ref. 4) Early and constant communication between the Government is the key to ensuring successful PBP implementation.

F. CHAPTER SUMMARY

The use of contract financing in Government acquisitions has proved beneficial in assisting and advancing contract performance. The use of PBP as a method of contract financing has been ongoing since their implementation into the FAR as a result of FASA. Recent changes removing some of the restrictions on PBP have opened the door for the expansion of their use. FAR subpart 32.10 provides guidance and policy on the use of PBP including the emphasis, “that performance-based payments are the preferred method of contract financing.” (Ref. 3) The successful use of PBP hinges directly on the development of the three key pieces of the PBP terms: (1) the payment event, (2) the definition of successful event completion, and (3) the value of the event. Furthermore, it is imperative that a sound working relationship between the various members of the Government team (buying command, DCMA, DCAA, etc.) is established to ensure the development of proper PBP terms. It is also vitally important that a solid Government-contractor bond be established in an effort to reduce the likelihood of future problems arising over PBP.

Chapter III will discuss the two surveys that were disseminated as part of the research on PFP. The first survey was distributed to Department of Defense acquisition workforce personnel to gain their insight into the use of PBP. The second survey was circulated to the defense industry to determine its perspective on the use of PBP.

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III. PERFORMANCE-BASED PAYMENTS SURVEY

A. OBJECTIVES OF SURVEY

In order to fully research, analyze, and evaluate the issues surrounding PBP and the reasons why they have not been readily adopted in DoD acquisitions, two separate online surveys were developed to gather the necessary data. One survey was designed for DoD acquisition workforce personnel such as contracting officers and program managers. This survey will be called **DoD Survey** throughout the remainder of this thesis. The second survey was intended for contracting, program management, and acquisition personnel within the defense industry. This survey will be called **Industry Survey** throughout the remainder of this thesis.

Each survey was designed to accomplish four major objectives: (1) assess how familiar contracting and acquisition personnel are with performance based payments, (2) document the extent of training received in PBP, (3) assess the perceived advantages and (4) assess the perceived disadvantages to using PBP. The majority of the survey questions were designed to give respondents the opportunity to express their answers fully in a verbatim format, rather than choosing from a predetermined list of answers.

B. SURVEY DEMOGRAPHICS

1. DoD Survey

Approximately 185 DoD Surveys were disseminated via email to a wide variety of commands covering all four armed services, as well as the Office of the Secretary of Defense (OSD), Defense Logistics Agency (DLA), Defense Contract Management Agency (DCMA), and Defense Contract Audit Agency (DCAA). Each survey also contained a request that the survey be forwarded to any acquisition or contracting personnel within the command. In all, 153 responses were received and, additionally, many respondents responded directly via email with additional comments or information. The DoD Survey can be found in Appendix A.

2. Industry Survey

Over sixty-five Industry Surveys were distributed to a wide spectrum of companies traditionally considered part of the defense sector. Responses were sought

from companies such as Boeing, Lockheed-Martin, United Technologies, Raytheon, Northrop-Grumman, as well as members of the National Contract Management Association (NCMA). Industry surveys were sent to contracting, program management, and acquisition personnel within these companies and twenty-six responses were received. The Industry Survey can be found in Appendix B.

C. SURVEY RESULTS

The results of the two performance based payment surveys provide valuable information and data concerning industry's, and the DoD workforce's, understanding of the PBP process.

1. Familiarity with Performance Based Payments

The first objective of the PBP surveys was to determine how familiar contracting and acquisition personnel are with performance based payments and each survey contained a question focusing on this objective. Both the DoD workforce and industry personnel were asked to rate their familiarity with PBP from four choices. The results bear out that the majority of people involved in contracting and acquisition are extremely familiar with PBP. The results appear below:

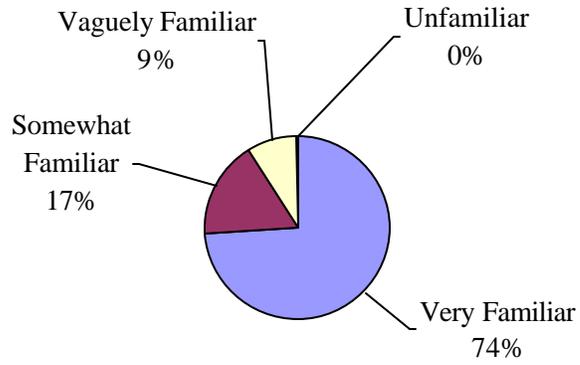


Figure 1. DoD Familiarity with PBP

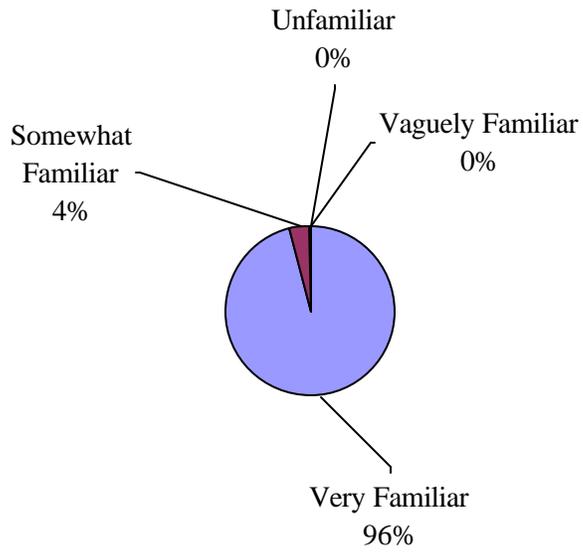


Figure 2. Industry Familiarity with PBP

2. Extent of Training in Performance Based Payments

Both the DoD Survey and the Industry Survey contained a question geared toward determining how much training that acquisition, contracting and program management personnel have received in the use of performance based payments. The results can be broken down into four major categories: 1) Formal course training (Defense Acquisition Workforce Improvement Act (DAWIA), Defense Acquisition University (DAU), NCMA courses), 2) Informal training (Seminars, briefings, organizational level training), 3) Self-taught (Read literature on PBP, on-the-job training, etc.) and 4) Little or no training in PBP. Very few responses indicated they had received any sort of formal training in the use of PBP. The majority of personnel have received little or no training on PBP or they have researched the topic on their own to learn how the PBP process should be implemented. Figures 3 and 4 show the results regarding the training received in PBP for both DoD and industry personnel.

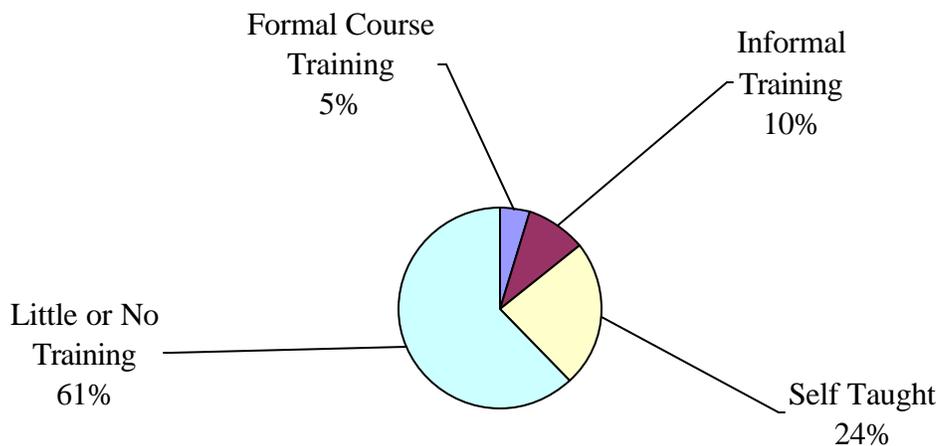


Figure 3. Training in PBP – DoD

Figure 4 shows the results of the industry survey regarding training received in PBP.

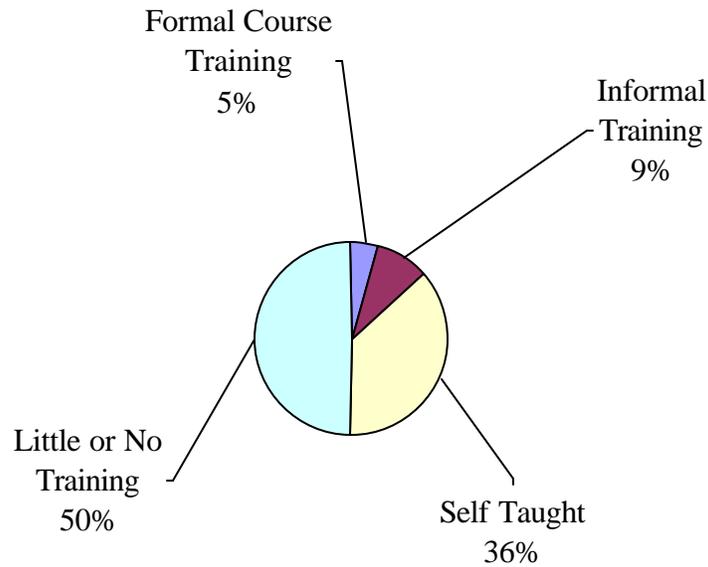


Figure 4. Training in PBP – Industry

3. Advantages of Performance Based Payments

One of the most important areas in each of the surveys focused on the perceived advantages and disadvantages to using PBP. The responses from the DoD workforce tended to fall into three areas: 1) Enhanced focuses on schedule and/or performance, 2) less oversight and/or administration, and 3) No advantages to using PBP. The overwhelming response from DoD is that performance based payments provide more attention on contract performance and schedule accomplishment. Forty-five percent of the respondents felt that the enhanced focus on schedule and performance was a definite advantage of PBP. Surprisingly, the second largest response, 23%, was received from people who felt there are no advantages to using PBP.

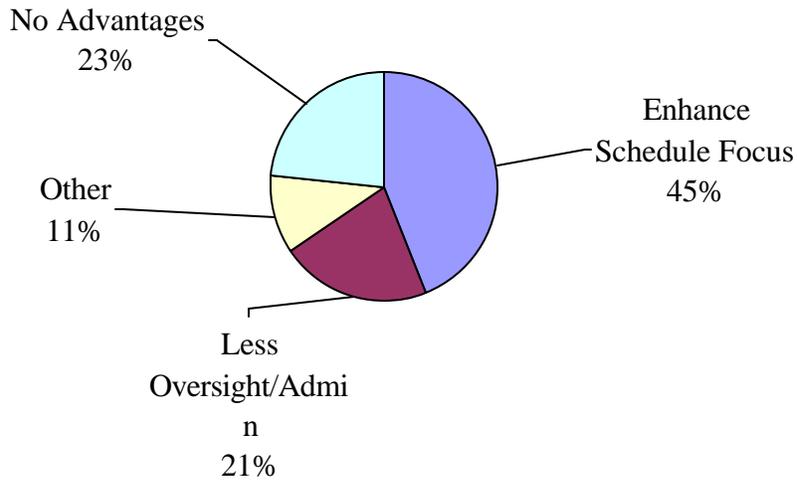


Figure 5. Advantages of PBP – DoD Perspective

As expected, the response from industry leaned heavily toward the benefits received from the increased cash flow provided by using PBP. The advantage of increased cash flow accounted for nearly 83% of the responses from the industry participants. Other advantages, as seen by industry, include reduced Government oversight and cost savings. Figure 6 shows the perceptions of industry as to the advantages of PBP.

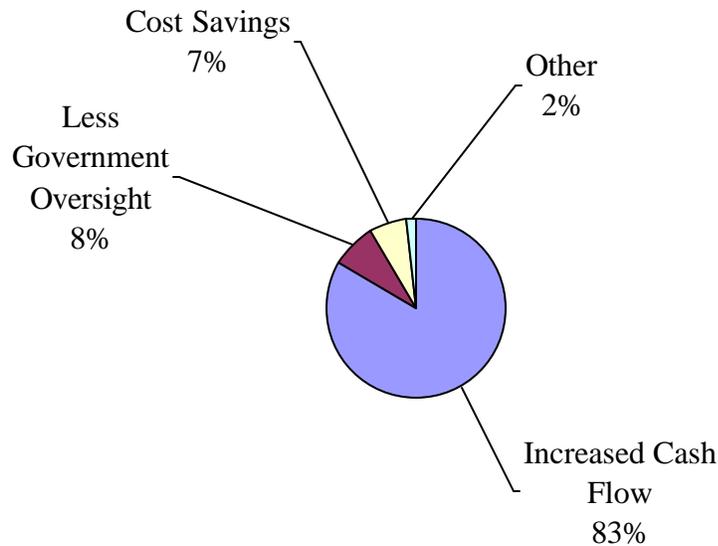


Figure 6. Advantages of PBP – Industry Perspective

4. Disadvantages of Performance Based Payments

Of all the questions in both surveys, the one that provoked the most interesting responses regarded the disadvantages to the use of PBP. The responses from DoD fell into four main groupings: 1) Difficulty in establishing PBP terms, 2) Increased oversight and/or administration, 3) Lack of training and/or understanding of PBP, and 4) Inappropriate for certain contract types. These four areas received generally the same number of responses. However, only 3% of respondents felt there were no disadvantages to using PBP. Figure 7 below shows the breakdown of the responses of DoD for the disadvantages of PBP.

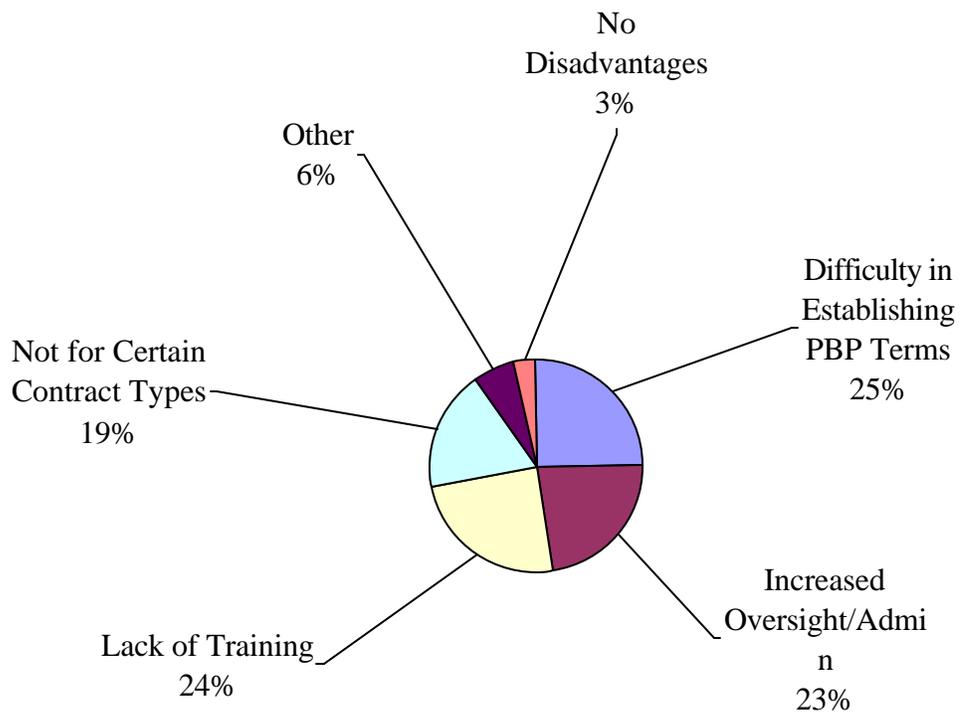


Figure 7. Disadvantages of PBP – DoD Perspective

Just as industry personnel felt there is one overriding advantage to PBP, the same can be said for the disadvantages. Industry personnel feel that the major difficulty with PBP is the actual payment process. Seventy percent of responses indicate that there is a significant problem, in their view, in the invoicing and payment process. Other responses cited the lack of training and/or familiarity of DoD personnel with PBP and the unwillingness of some DoD personnel to use PBP as disadvantages. Figure 8 shows the industry breakdown.

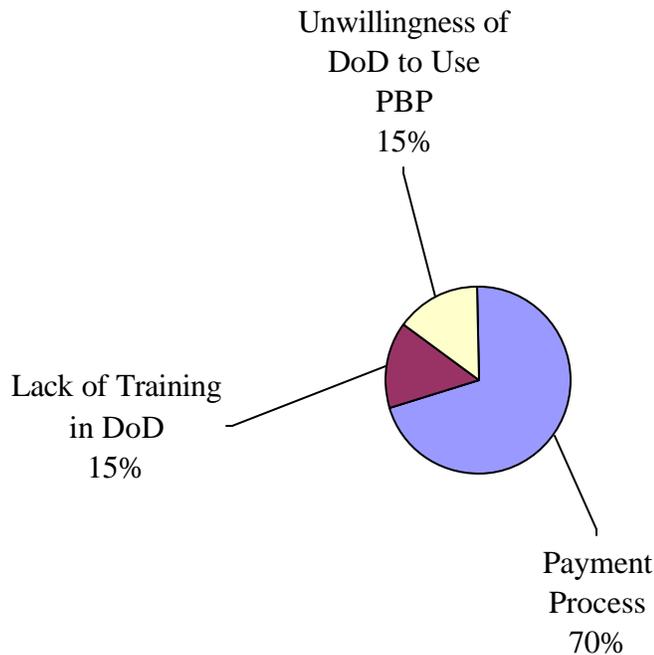


Figure 8. Disadvantages of PBP – Industry Perspective

D. CHAPTER SUMMARY

In order to come to some conclusions as to why performance based payments have not been readily adopted, two separate online surveys were distributed to members of the DoD acquisition workforce and defense industry contracting, acquisition, and program management personnel. The objectives of these surveys were (1) assess DoD’s and industry’s familiarity with PBP, (2) document the extent of training received in PBP, (3) assess the perceived advantages of PBP and (4) assess the perceived disadvantages to using PBP.

The next chapter analyzes the results of the two surveys in an effort to better understand why PBP have not been more readily adopted. It is highly likely that the perceived disadvantages to using PBP have formed the root causes behind why they have not been more widely accepted. Therefore, much of the analysis explores these disadvantages. However, Chapter IV also looks at the advantages of performance based

payments and compares whether the results of the surveys align with what the Government contends are the benefits of PBP.

IV. ANALYSIS OF RESULTS

A. INTRODUCTION

In fiscal year 2000, only 195 contractual actions used performance-based payments for contract financing. (Ref. 6) This figure has increased to 285 actions by the first quarter of fiscal year 2001. While the percentage change of 43% may appear to be a significant change, this is not the case when compared with the number of contract actions using traditional progress payments. By the first quarter of FY01, traditional progress payments were used on 3,190 contract actions compared to the 285 PBP. Additionally, PBP were used with only 85 different contractors compared to 795 different contractors using traditional progress payments. (Ref. 7) Certainly, these figures do not correlate with the Government's goal of making performance based payments the primary and preferred method of contract financing. This chapter analyzes the results of the DoD and Industry surveys in an effort to determine the reasons why PBP have not been readily adopted.

This chapter first compares the advantages of performance-based payments as outlined by the Office of the Deputy Under Secretary of Defense for Acquisition Reform (DUSD(AR)) in its User's Guide to Performance Based Payments with the responses provided by the DoD acquisition workforce and the defense industry. Secondly, the chapter focuses on the disadvantages of performance-based payments as perceived by both DoD and industry personnel. The apparent disadvantages of PBP appear to be the primary reasons why they have not been accepted as the principle form of financing and, therefore, warrant ample analysis. Finally, the chapter summarizes the analysis of the data by outlining the major reasons why PBP have not been readily adopted in DoD contracting.

B. ADVANTAGES OF PERFORMANCE BASEDPAYMENTS

The DUSD(AR) User's Guide to Performance Based Payments breaks down the advantages of performance based payments into two categories: Government Advantages and Contractor Advantages. (Ref. 6)

Government Advantages	Contractor Advantages
1. Enhanced technical and schedule focus.	1. Improved cash flow.
2. Reinforced roles of program managers and integrated product teams (IPTs).	2. Reduced costs of oversight and compliance.
3. Broadened contractor participation.	3. Total management team focus on technical and schedule progress.
4. Decreased oversight and/or administration.	

Table 1. Advantages of Performance-Based Payments

1. Government Advantages

a. Enhanced Focus on Schedule and Technical Performance

The main objective behind the use of performance-based payments is tying financing payments to actual work accomplished on a particular contract. As such, using PBP focuses attention on attaining measurable technical progress and meeting schedule commitments. The use of PBP “reinforces the primacy of technical and schedule accomplishment.” (Ref. 4) Additionally, since both the contractor and the Government must agree up front to the PBP events, completion criteria, and event valuation, the parties should have a solid mutual understanding of the need for sound technical and schedule emphasis. The User’s Guide indicates that enhanced focus on schedule and technical accomplishment is a major advantage of PBP. The results of the DoD Survey support this belief and the acquisition workforce feels strongly that improved concentration on a program’s schedule and technical performance is, in fact, a definite advantage to PBP. Moreover, enhanced program focus received the highest percentage (46%) of responses from the DoD results in terms of PBP advantages.

b. Emphasis on Roles of Program Managers and Integrated Product Teams

The User's Guide specifies that the use of performance-based payments emphasize the roles of the program manager and Integrated Product Team (IPT). Using PBP require a great deal of coordination between all parties involved. As such, the early and active involvement of the program manager and other members of an IPT allows the process to operate more smoothly and efficiently. By involving the contractor in the formulation of the PBP plan, a higher level of coordination should be achievable. However, the results of the DoD survey do not bear this point out as an advantage to using PBP. In fact, very few responses indicated that the supposed reinforcement of the roles of the IPT and program managers was a significant advantage to using PBP. The number of responses citing this as an advantage was not enough to warrant segregating this response into a separate grouping and, therefore, this response appears in the "other" category.

c. Broadened Contractor Participation

A third Government advantage to using performance based payments, according to the User's Guide, is a broadened level of contractor participation. Unlike traditional progress payments that are tied to costs incurred, PBP are performance driven. Therefore, contractors are not required to maintain Government-approved accounting systems, as they would be for traditional progress payments. Many companies that do not currently do business with the Government claim that there are too many regulations or requirements to receive a DoD contract. The prerequisite for an approved accounting system is one such obstacle. The use of PBP, however, eliminates this requirement and increases the emphasis on performance instead of cost. The hope is that companies usually characterized as non-traditional sources, could potentially become suppliers for Government procurements. Unfortunately, the results of the survey fail to support the idea of broadened contractor participation as an advantage. In fact, zero responses indicate that this is a particular advantage to using PBP.

d. Reduced Oversight and/or Administration

A final advantage to using PBP described in the User's Guide is a reduction in the amount of oversight and/or administration required. Many DoD

workforce respondents felt that utilizing PBP did, in fact, reduce the oversight and administration required, especially when compared with traditional progress payments or other forms of contract financing. Twenty-one percent of the responses cited reduced oversight and/or administration as a benefit of using PBP.

e. No Advantages to PBP

The most startling result of the DoD survey, however, was that 23% of respondents felt there are **no** significant advantages to the Government in using PBP. This figure amounts to the second highest total of all responses. This staggering figure certainly should be characterized as a disadvantage of PBP and cited as a major reason why PBP have not been readily adopted. This is discussed later in this chapter.

In summary, it appears that the DoD workforce's perceived advantages align only partially with the advantages outlined in the User's Guide. The workforce believes that enhanced focus on performance and reduced oversight are definite advantages to PBP, but do not see an increase in contractor participation or a reinforcement of the PM's role or of IPTs. Most striking is that almost one quarter of all respondents do not see **any** advantages to using performance-based payments.

2. Contractor Advantages

a. Increased Cash Flow

By far, the greatest advantage for a contractor to utilize performance-based payments is the possibility of increased cash flow. Under FAR 32.1004, PBP can be made for up to 90% of the total contract price or line item price, whereas traditional progress payments are limited to 80% of incurred costs. This difference can have a significant impact on a company's cash flow. The results of the industry survey definitely support DUSD(AR)'s opinion that the potential for improved cash flow is a major contractor advantage. Eighty-three percent of all industry survey respondents felt that the likelihood of increased cash flow is the major advantage of using performance-based payments. Additionally, in interviews conducted with various industry personnel, the chance of increased cash flow is seen as the single, primary motivator for industry personnel to seek out the use of PBP on their contracts.

b. Reduced Oversight and Compliance Costs

The User's Guide notes that a reduction in oversight and compliance is also a significant advantage for contractors using PBP. This is due, in part, to contractors not being required to maintain Government approved accounting systems to obtain PBP. If they used PBP as the method of financing, contractors are not forced to expend additional resources to implement and maintain an approved accounting system to comply with many of the Government's cost-based requirements. While the survey results suggest that industry feels this is somewhat of an advantage, the total percentage of responses citing reduced oversight or compliance was less than 10%. One factor that could be behind this low percentage is that many DoD contractors already have Government approved accounting systems. If this is the case, it is highly unlikely that a company would abandon their existing system. Therefore, they would probably not realize the benefits of reduced oversight and compliance. In addition, many contractors probably have other cost type contracts that still require the Government approved accounting system. However, for a potential new DoD contractor, the idea of not being forced to expend added resources for a Government approved accounting system may be a real advantage.

c. Total Management Focus on Schedule and Technical Performance

The User's Guide also states that a renewed, total management concentration on schedule and technical performance is a major advantage to using PBP. Just as the use of PBP focuses the Government team on technical and schedule performance, PBP tend to concentrate a company's management team toward these same goals. Since the contractor's cash flow is tied directly to meeting certain PBP events, significant emphasis is placed on these events by a contractor's management team. However, the responses received from industry failed to support management focus as an advantage to PBP. Only a few responses suggested that total management focus on schedule and performance was a distinct advantage of PBP.

The results of the industry survey are clear as to the perceived contractor advantages to using performance-based payments. The opportunity for increased cash

flow is the major reason contractors are drawn to PBP. It is the prime motivating factor to them. The only other advantage of any significance to industry is the reduction in oversight and compliance and their associated costs.

C. DISADVANTAGES OF PERFORMANCE BASED PAYMENTS

One of the shortcomings of the DUSD(AR) User’s Guide is that it fails to properly address the disadvantages of using performance-based payments. In fact, there is very little literature available that outlines what the potential drawbacks are to using PBP. However, the results of both PBP surveys and information gained from conducting telephone interviews with DoD and industry personnel show that there are a number of real or perceived disadvantages to using PBP. These disadvantages are significant and extremely important as they are also the major reasons why PBP have not been adopted as the preferred method of contract financing.

Government Disadvantages	Contractor Disadvantages
1. Significant difficulties in establishing PBP terms.	1. Payment process for PBP is not automated and is extremely slow.
2. Serious lack of training in the use of PBP.	2. Serious lack of training in DoD in the use of PBP.
3. Increased oversight and administration.	3. Unwillingness of DoD to use PBP.
4. PBP not appropriate for certain contract types.	

Table 2. Disadvantages of Performance-Based Payments

1. Government Disadvantages

The results of the DoD survey provide valuable information as to why DoD workforce personnel have been reluctant to implement PBP. Each of the main disadvantages of PBP is itself a reason why PBP have not become the preferred contract financing vehicle. The reasons are simple: 1) PBP terms are difficult to set up and agree on, 2) training in PBP is virtually nonexistent, 3) PBP require increased levels of oversight and administration, and 4) PBP are not appropriate for certain contracts. These

four disadvantages are almost equally distributed as the major disadvantages to performance-based payments.

a. Difficulties in Establishing PBP Terms

The DoD workforce feels that the up-front work required to use PBP is too difficult and time consuming. Based upon their responses to the survey, the workforce seems to feel that the efforts necessary to negotiate, establish, and agree upon PBP terms early in contract formation far outweigh any advantages gained later in the contract period. Even the User's Guide recognizes that the "decision to use PBP as the financing technique for all or portions of a contract will require more time and effort of the contracting officer, the contractor, and all members of their supporting teams during the preaward phase." (Ref. 4) One quarter of all respondents indicated that the difficulty and extra effort required to establish meaningful PBP terms was a major drawback to using PBP. It is much easier for contracting officers to simply insert the Progress Payments clause into a contract than it is to take on the additional workload of PBP. Additionally, with the recent reduction in personnel in the acquisition workforce, people are being forced to accomplish more work, with fewer personnel resources, in the same amount of time. Undertaking PBP is perceived as simply adding additional, unnecessary workload to many members of the DoD workforce.

Another aspect of the difficulty felt by the workforce in establishing PBP terms is that the terms generally require a solid understanding of the contractors' processes and procedures in order to develop meaningful, measurable events and criteria. If a contracting officer is unfamiliar with the manufacturing process used by a certain contractor in the development of a product, he or she will have an even more difficult time establishing the PBP terms. For example, the User's Guide provides an example of the use of PBP in an aircraft production contract. The first PBP event is described below:

Event No.	Description	Accomplishment Expected	Verification Method	Event Value (Stated as % of Item Unit Price)
1	Rough machining of main landing gear bulkhead frames	Completion of one set of four main landing gear bulkhead frames through the initial numerically controlled machining stage.	Planning documents stamped and signed by contractor production control and DCMA representatives.	10%

Table 3. Example of PBP Terms – Aircraft Production (Ref. 4)

In order for a contracting officer to be able to establish the PBP term described above, he or she must have a solid understanding of the contractor’s manufacturing process and manufacturing and production processes in general. If this is not the case, the process of establishing PBP terms can become even more time consuming and difficult. Additionally, without significant experience and knowledge of manufacturing and production processes, the likelihood of poorly established PBP terms increases. The Defense Contract Management Agency (DCMA) is the DoD agency responsible for the majority of DoD contract administration and the oversight of PBP. In interviews conducted with various members of DCMA, one of the problems cited was poorly established PBP terms. A chief complaint of those interviewed was the lack of familiarity of contracting officers with the manufacturing processes involved in the PBP terms. This lack of expertise leads directly to inadequate PBP terms being established. When this lack of experience and understanding is coupled with a lack of training in the use of performance based payments, major problems are almost certain to appear.

b. Lack of Training in PBP

An equally important disadvantage cited by the DoD workforce is that a serious lack of training exists in the proper use of PBP. (This sentence was redundant.) One quarter of all respondents cited the lack of training as a major concern. Additionally, 61% of DoD respondents indicated that they have received little or no training in the use of PBP. More workforce personnel (24%) have taught themselves the basics of PBP than have received formal training or even informal, seminar-type training (15% combined).

Most of the DoD workforce that has taught themselves the nuances of the PBP process have relied upon the DUSD(AR) User's Guide for information. Unfortunately, this guide does not provide the detailed information required to understand PBP. As with any new acquisition or contracting initiative, training on the topic must be both extensive and intensive - to date, it appears that training on PBP has been neither. There is no formal training on PBP other than the User's Guide and the topic is not addressed with any significance in any formal courses. The Under Secretary of Defense (Acquisition, Technology, and Logistics (USD(AT&L))) has stated that a CD-ROM or other computer-based training program is to be produced in the near future. However, by placing a renewed emphasis on using PBP without first putting in place an extensive, intensive training program is altogether self-defeating.

c. Increased Oversight and Administration

Although the User's Guide claims that a chief advantage of PBP is the reduction in oversight and administration necessary when they are used, unfortunately, the acquisition workforce feels strongly that the opposite is true. Twenty-three percent of DoD respondents stated that oversight and administration actually **increased** for contracts utilizing PBP. DoD personnel attribute much of this increase to the extra effort required in establishing PBP terms, difficulties in getting contractors paid, and surveillance on PBP events. An interesting point to note is that, while 23% cited an increase in oversight and administration as a disadvantage of PBP, as was stated earlier, 21% of respondents cited reduced oversight and administration as an advantage of PBP. The results of the survey seem to conflict one another. One part of the DoD workforce feels PBP reduce Government involvement, while another part feels PBP add to the required oversight.

The verbatim responses of the DoD survey provide two explanations for this anomaly. First, there appears to be a lack of understanding of the level and detail of oversight and administration required for PBP. This can be directly tied to the serious inadequacy of training in PBP. DoD personnel are unclear on what oversight and administrative requirements exist when implementing PBP. There is obviously a disconnect in the process when a large segment of the workforce feels PBP reduce administration and another equally large segment believes PBP add to the administrative workload.

Secondly, it looks as if one segment of the DoD workforce views PBP as adding to their workload and another segment sees PBP reducing their oversight requirements. The responses in the DoD survey indicate that, almost universally, personnel within DCMA see PBP as causing significant increases to their workload. Responses received from DCMA indicate that PBP create “admin burdens,” increase “CAO verification,” and increase “admin and oversight of contractor performance.” (Ref. 8)

One of the challenges currently facing DCMA, like many Government organizations, is declining manpower. Since the end of 1997, DCMA’s workforce has decline by over 2000 people. If performance based payments are adding to the DCMA workload, the organization may not be staffed well enough to handle the additional workload. Many responses to the DoD survey attributed the increase in administration to understaffing and other human resource related problems.

d. Performance Based Payments Are Not Appropriate For All Contracts

The current policy governing the use of PBP limits their use to fixed-price type contracts. Recent changes allow PBP to be used on research and development contracts and contracts awarded using competitive negotiations. Even with these new changes, PBP may still not be used for cost reimbursement contracts, since the purpose of PBP is to provide financing payments based on performance rather than costs incurred. As such, performance based payments are not appropriate for all contract types. However, the responses to the DoD survey indicate another disadvantage and additional problem exists concerning the appropriate use of PBP. Many DoD workforce members

believe that, while PBP may be allowed on a certain contract, using them is not appropriate and not in the Government's best interest. Specifically, some DoD personnel feel that the push to implement PBP has forced them to use this technique on contracts where they are not particularly suitable.

The results of the DoD survey show that 19% of respondents felt that PBP were not suited to certain contracts. Responses indicate that some workforce personnel had difficulty in fitting PBP terms to their particular contract. Again, this issue can be tied directly to the lack of training in PBP. Certain contracts are better suited to PBP than others. If PBP are used on contracts where they are not appropriate, then significant problems and issues can arise. Likewise, the pressure from USD(AT&L) to make performance based payments the "most prevalent form" of contract financing by 2005, is forcing DoD to use them when they are not necessarily a good fit.

2. Contractor Disadvantages

The responses to the industry survey delineate three major disadvantages to using performance based payments: 1) problems in the PBP payment process, 2) the lack of training on PBP within DoD, and 3) the unwillingness of DoD to use PBP. In analyzing these three disadvantages to using PBP, it is evident that each is also a prime reason why PBP have not been more readily adopted.

a. Problems in the PBP Payment Process

The chief complaint of industry personnel regarding the use of performance-based payments involves the payment process as it currently exists. In truth, 70% of industry respondents declared that problems with the PBP payment process were a substantial disadvantage to their use. Unlike the payment process for traditional progress payments, the system in place for processing PBP is not automated. Requests for payment still must be submitted via mail or fax for payment, unlike traditional progress payments in which the entire process is completed electronically. DFAS's Contractor Payment Information booklet states that its payment system "has not yet been modified to pay PBPs automatically. Consequently, all PBPs will have to be paid manually until system changes can be developed." (Ref. 9) In fact, a standard payment

request form, found in Appendix C, was only recently developed and implemented by DFAS.

In interviews with various contractor representatives, it appears that contractors wait, on average, between two to three months from the time of PBP invoicing until payment is actually received. This is compared to the almost immediate payment for traditional progress payments. The lack of electronic submission for PBP payment is considered a serious disadvantage to contractors. Industry cites the opportunity for improved cash flow as the chief advantage to using PBP, but the breakdown in the payment process and lengthy payment delays makes this contract financing technique less attractive.

b. Lack of Training in Performance Based Payments Within DoD

Earlier, DoD personnel noted the inadequacy of training in PBP as a serious drawback to their use. The results of the industry survey point out that contractors feel similarly about the training within the DoD ranks. 15% of respondents believe the insufficient training within DoD is a serious problem and prevents the use of PBP from expansion. Industry personnel believe that the DoD workforce is unfamiliar with how to best structure PBP terms, the validation and verification process for PBP events, and how to resolve payment issues when they arise. Rightfully, industry is somewhat wary of using PBP when the level of knowledge on DoD's side is less than optimal.

One interesting note is that the industry survey responses also indicate that, as with DoD, the majority of respondents have had almost no formal or even informal training in the use of performance based payments. Fifty percent of respondents have had little or no training in PBP and an additional 36% have taught themselves the nuances of the PBP process. These results differ only slightly with the results of the DoD survey in terms of training received in PBP.

c. Unwillingness of DoD to Use Performance Based Payments

The final major drawback to PBP from an industry perspective is the apparent unwillingness of DoD to use PBP. It comes as no surprise that 15% of respondents feel that DoD's unwillingness to utilize PBP is a considerable disadvantage.

DoD has been reluctant to adopt PBP and implement them, even though industry appears willing and ready to use this form of financing. Survey responses indicate that contractors are asking for PBP, but DoD has been slow to respond. Even more surprising is that 22% of contractors stated that they had never been approached by DoD to use PBP even though they were applicable to the contract at hand. Even with the push from higher levels for renewed attention to PBP, the DoD workforce still relies heavily on other forms of financing. As with many new initiatives within contracting and acquisition, a cultural change is necessary in order to implement new policies and/or procedures. Judging by the industry survey responses, this culture change has yet to take place within DoD.

D. CHAPTER SUMMARY

As of the first quarter of FY01, only 285 contract actions utilized performance-based payments as the method of contract financing compared to 3190 actions that used traditional progress payments. This information provides evidence that PBP have not become the preferred method of contract financing in DoD contracts. The data gathered and analyzed from the two PBP surveys provides some important results. While the DoD workforce does recognize the advantages of PBP, such as increased contractor cash flow and a focus on technical and schedule performance, they seem to believe that the disadvantages associated with PBP far outweigh the benefits of their use. DoD personnel specifically cite numerous disadvantages to the use of performance-based payments. More importantly, however, is that these disadvantages point to several reasons why performance based payments have not been readily adopted as the preferred method of contract financing in DoD contracts.

Chapter V summarizes the research on PBP, draws conclusions as to the reasons why PBP have not been more readily adopted, provides recommendations for improvement supporting these conclusions, and suggests areas for further research.

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V. CONCLUSIONS AND RECOMMENDATIONS

A. GENERAL

PBP can no longer be considered a new and innovative contract financing technique. The vast majority of contracting and acquisition professionals are well aware of this method of contract financing and its preference in Government and DoD contracts. PBP seek to tie contract financing to actual contract performance instead of costs incurred as traditional progress payments do. The aim of PBP is to focus both the Government and the contractor on actual technical work accomplished, strengthen the relationship between Government and industry, and expand DoD's dedication to transform its business affairs. Nonetheless, PBP remain widely unaccepted and have not garnered the support from the DoD workforce that has been hoped for. Even though the acquisition workforce recognizes the advantages of PBP, such as improved contractor cash flow and enhanced focus on technical and schedule performance, the perceived disadvantages have held the expansion of PBP in check.

The primary question addressed by this thesis was: Why have Performance-Based Payments (PBP) not been readily adopted as the primary method of contract financing in the Department of Defense (DoD)? To answer this question, two separate surveys concerning PBP were developed and disseminated. One survey applied to and was distributed to DoD acquisition workforce personnel and another to contracting/acquisition personnel within the DoD industrial base. Additionally, a literature review of available resources on PBP was conducted, including books, magazine articles, Government reports, Internet-based materials and other library resources. Supplementary information was garnered from interviews conducted with personnel within both DoD and industry.

Chapters III and IV provided, respectively, the results of the two PBP surveys and an analysis of the data collected from these surveys. DoD survey respondents included a wide variety of commands covering all four armed services, as well as the Office of the Secretary of Defense (OSD), Defense Logistics Agency (DLA), Defense Contract Management Agency (DCMA), and Defense Contract Audit Agency (DCAA). Industry

survey responses were received from a wide spectrum of companies traditionally considered part of the defense sector. Each survey was designed to accomplish four major objectives: (1) assess how familiar contracting and acquisition personnel are with performance based payments, (2) document the extent of training received in PBP, (3) assess the perceived advantages and (4) assess the perceived disadvantages to using PBP.

Based upon the examination of the results of the two PBP surveys, as well as the comprehensive literature review and interviews conducted on PBP, the purpose of this chapter is to outline the key reasons why PBP have not been readily adopted as the preferred method of contract financing. It also discusses ways in which this form of contract financing may reach the goal of being the prevalent contract financing technique. The following conclusions and recommendations are derived from the research for this thesis.

B. CONCLUSIONS

The results of the two performance-based payments surveys, coupled with interviews of DoD and industry personnel, revealed several challenges that are hindering the growth of PBP in DoD contracts. Specifically:

1. Training in Performance-Based Payments is Inadequate

PBP can no longer be considered a new, alternative method of contract financing as they have been part of the FAR since 1995. However, the only significant training material available is the DUSD(AR) User's Guide to Performance Based Payments. In addition, this training aid does not provide the necessary detailed information and guidance on the complex PBP process.

The lack of training in PBP was cited as a major disadvantage to their use by both DoD and industry personnel. Personnel are unfamiliar with the intricacies of establishing PBP terms and the oversight and administration required in dealing with PBP. Furthermore, now that policy changes have expanded to allow PBP on negotiated contracts and research and development contracts, the need for extensive training becomes even more important. USD(AT&L) has stated that an online/CD-ROM tutorial is being developed to train the workforce on PBP, but this product has yet to be fielded.

The training deficiencies have ramifications in other areas affecting PBP. Without fully understanding PBP, the chances of using PBP on a contract inappropriately are likely to increase. Conversely, there may be instances where PBP would be a good fit for a certain contract, but personnel lacking the thorough training in PBP may choose another form of financing instead. If it is the stated policy of USD(AT&L) that by “fiscal year 2005, this method of financing should be used in most contracts that provide financing” (Ref. 6), it is critical that a comprehensive training program be established to ensure the proper use and implementation of performance-based payments.

2. Lack of Coordination Between the PCO and ACO in Establishing Performance-Based Payments

One of the advantages of performance-based payments, according to DUSD(AR) is the strengthening of Integrated Product Teams, that include personnel from the buying command, DCMA, DCAA, and contractor. However, the research indicates that a serious lack of coordination in the establishment of PBP terms exists between the PCO’s organization (the buying command) and the ACO’s organization (DCMA). Even though a portion of workforce personnel indicated they realized a reduction in oversight and administration when using PBP, an equally large percentage of both DoD and industry personnel indicated that the amount of oversight and administration required actually increased. The research indicates that there is an acute lack of coordination between the PCO and ACO in establishing PBP terms and that the Integrated Product Teams are not playing a significant role in the process. Many of the problems involving oversight and administration could be avoided if the IPT is functioning properly. Concerns and issues over PBP events, completion criteria, valuation and payment questions could be addressed by the IPT well before they evolve into serious problems during contract performance. It is critical to the successful implementation of PBP to ensure there is close coordination between the ACO, PCO and IPT throughout the contract performance period.

3. The Payment Process for Contracts Using Performance-Based Payments Needs Drastic Improvement

The primary advantage for contractors to utilize PBP is the probability of increased cash flow. This opportunity attracts contractors to the PBP concept and

motivates them to perform. However, this advantage is almost completely nullified by the flawed payment process for PBP. While the likelihood of increased cash flow motivates contractors to use PBP, the problems with the payment process leads them toward traditional progress payments and other contract financing methods.

The major complaints with the payment process from contractors are that it is slow and not automated. Contractor's must still submit payment requests via mail or fax and the requests are still processed manually by DFAS. Conversely, requests for payment of traditional progress payments are submitted electronically and are quickly paid by DFAS. The research shows that the average time from invoice submission to actual payment is 2-3 months. Problems with the payment process also lead directly to an increased administrative burden on both DoD personnel and the contractor.

4. A Culture Change Within DoD Is Still Needed

Even though PBP are no longer a new contracting initiative, the acquisition workforce is still somewhat reluctant to change the way in which it operates. Many personnel within DoD still do not recognize the advantages of PBP or do not feel these advantages outweigh the disadvantages. Some workforce members also see PBP as requiring additional effort on their part, without any significant benefits in return. Consequently, these people are more likely to use traditional progress payments or other forms of contract financing techniques rather than exploring the option of performance-based payments. The research shows that many within industry feel that DoD personnel are unwilling to use PBP. Additionally, industry feels that the extent of PBP usage varies by DoD organization and that there does not appear to universal acceptance of this form of financing.

C. RECOMMENDATIONS

The following recommendations are provided to assist DoD in its efforts to ensure PBP become the preferred method of contract financing where appropriate.

1. Develop Comprehensive Training On Performance-Based Payments

The only current guidance available on performance-based payments is the DUSD(AR) User's Guide and DCMA's One Book guidance, found on its website. While each of these references provide important information concerning the use of PBP, they

do not offer the detailed knowledge and training necessary to successfully establish and administer PBP terms. USD(AT&L) is in the process of developing a CD-ROM and/or online tutorial to provide additional training on PBP. This is a good first step. However, to fully provide the type of extensive training needed, education on PBP must be incorporated into the requisite DAWIA courses. Training should also be conducted at the organizational/command level to make certain that all personnel receive the necessary instruction in PBP. In addition, DoD must interact with professional associations such as the National Contract Management Association (NCMA) to provide additional training opportunities.

Contracting Officers that successfully implement PBP must be encouraged to share their experiences and lessons learned regarding PBP. The Defense Acquisition Deskbook is an ideal location for the incorporation of these lessons learned and allows a wide audience the opportunity to learn more about successfully implementing PBP.

2. Strongly Encourage the Use of Integrated Product Teams in Establishing Performance-Based Payment Terms

It is imperative to the successful implementation of the PBP process that close coordination between the PCO, ACO and contractor exists. The most effective way to ensure this coordination is through Integrated Product Teams (IPT). A properly functioning IPT works closely together to fully discuss the issues, concerns and problems associated with establish sound PBP terms. The research shows that many of the problems that surface involving PBP could have been avoided if closer coordination existed throughout the PBP process.

In addition to encouraging the use of IPTs, it is also critical that the importance of the ACO-PCO relationship be emphasized. The value of this relationship as it pertains to the use of PBP cannot be stressed heavily enough. Many of the challenges brought on by the use of PBP are due, in large part, to the breakdown of this relationship. A renewed emphasis on the coordination between the ACO and PCO is essential for the success of the PBP process.

3. Improve the Payment Process

There is simply no valid reason why PBP invoices must still be processed manually. The lack of an automated payment system is hindering DoD's efforts to attract contractors to use performance-based payment. In addition, the delays currently associated with the payment process are a direct result of the manual process. DFAS has established a standard form for the submission of PBP requests. It is critical that DFAS automate the invoice submission and payment process for PBP as soon as possible and reduce the payment delays associated with this form of contract financing.

4. Continue To Strongly Mandate the Use of Performance-Based Payments

The most recent guidance on performance-based payments is found in the DUSD(AR) User's Guide. This information contains the policy memorandum of 13 November 2000 as well as an additional call for the use of PBP dated 22 January 2001. While these calls for renewed emphasis on PBP are important, they do not have a strong enough effect to change the way in which the acquisition workforce operates. In order for PBP to become the prevalent form of contract financing, the push for their use must be continuous and fervent. Furthermore, by implementing the first three recommendations of this thesis, the DoD workforce should become more versed in the nuances of PBP and more prepared and willing to use them. The DoD workforce has been slow to embrace PBP and without the constant pressure to transition to this new paradigm, the use of PBP will continue to stagnate.

D. SUMMARY OF RESEARCH QUESTIONS

In order to accomplish the objectives of this thesis, the following questions were developed and investigated:

1. Primary Research Question: Why have Performance-Based Payments (PBP) not been readily adopted as the primary method of contract financing in the Department of Defense (DoD)?

The research for this thesis revealed that even though regulations dictate that PBP are the preferred method of contract financing, DoD has been slow to adopt this form of financing for four basic reasons. First, the amount of training provided to the acquisition workforce in PBP is seriously inadequate. This shortfall of training affects every aspect

of the PBP process. Second, there is a lack of coordination between the various parties involved in the PBP process. Many of the problems that are causing DoD personnel to use the traditional forms of financing instead of PBP could be avoided by closer coordination between the parties. Third, the payment process for PBP is flawed. The current process still requires manual submission and processing of payment requests. Finally, the DoD workforce is still unwilling to adopt the PBP technique. Many in the workforce do not feel the benefits of PBP outweigh the additional effort required on their part.

2. Secondary Research Question #1: What is the background and history of PBP?

The literature review conducted in Chapter II revealed that PBP are a method of contract financing for non-commercial items which are made on the basis of: (1) objective and quantifiable results, (2) accomplishments of events, or (3) other quantifiable measures of results. Since their inclusion in the FAR in October of 1995, changes to the policy surrounding PBP made them the preferred method of contract financing and removed various restrictions on their use. PBP may now be used on fixed-price contracts awarded through competitive negotiations as well as on research and development contracts.

3. Secondary Research Question #2: What are the pros and cons of using PBP?

The research revealed that there are several advantages and disadvantages to the use of performance-based payments from both the Government and contractor side. Advantages include enhanced focus on technical and schedule performance, increased contractor cash flow, and broadened contractor participation. Disadvantages to PBP include difficulties in establishing PBP terms, a non-automated payment process, and increased oversight and administration.

4. Secondary Research Question #3: What is the DoD acquisition workforce's perspective of the PBP option?

The responses to the DoD survey indicate that the workforce still is unsure as to whether or not the PBP option is a good one. Specifically, the workforce cites several problems with using PBP. The concerns from a DoD perspective include the lack of

training received in PBP, an increase in oversight and administration required on PBP, the difficulties in establishing solid PBP terms, and the appropriateness of PBP on certain contracts. Additionally, many DoD personnel felt PBP offered no significant advantages over the traditional forms of financing. In essence, the DoD acquisition workforce is still skeptical of the PBP option.

5. Secondary Research Question #4: What is the DoD industrial base's perspective of the PBP option?

PBP offer contractors the probability of increased cash flow and this reason alone makes the option attractive to them. Most contractors are enthusiastic about using PBP, but feel that DoD is still unwilling to explore this technique to its fullest. Furthermore, industry is dismayed by the problems associated with the payment process. There appear to be significant delays in receipt of payment and the manual submission and processing system currently in place detracts from the option's benefits.

E. AREAS FOR ADDITIONAL RESEARCH

The following are recommended topics for further research:

1. Research and develop a comprehensive training program for performance-based payments.
2. Research and analyze the oversight and administration requirements on contracts using PBP. Compare these requirements with those of contracts using traditional progress payments.
3. Determine methods to encourage the DoD acquisition workforce to adopt PBP and implement them.
4. Research and analyze the effectiveness of PBP on contracts awarded through sealed bid procedures versus those awarded via competitive negotiations.

APPENDIX A

**PERFORMANCE-BASED PAYMENTS THESIS SURVEY
DOD VERSION**

1. Please provide your name (optional).

--

2. What organization do you work for?

--

3. What is your position and/or series within your organization?
(ACO, PCO, Contract Specialist, PM, etc.)

--

4. How familiar are you with Performance-Based Payments (PBP) in Government Contracting?

<input type="checkbox"/> Very familiar (I've used PBP before or have been involved in their use.
<input type="checkbox"/> Somewhat familiar (I know what PBP are and plan to use them.)
<input type="checkbox"/> Vaguely familiar (I've heard of PBP.)
<input type="checkbox"/> Unfamiliar (What are PBP?)

5. Did you know that PBP are the preferred method of DoD contract financing and should be the most prevalent form of contract financing by the year 2005?

<input type="checkbox"/> Yes
<input type="checkbox"/> No

6. What type of training have you had in PBP and where did you receive it? (Specific training in PBP, discussed in DAWIA/DAU training, online training, organizational training, etc.)

--

7. What do you feel are the advantages of using PBP? (Enhanced focus on technical & schedule accomplishment, less oversight and admin, broadened contractor participation, no advantages, don't know, etc.)

8. What do you feel are the disadvantages of using PBP? (Increased oversight and admin, don't fit well with all contract types, difficulty in getting contractors to agree to PBP, lack of training, don't know, etc.)

9. May I contact you for additional information or questions concerning the use of PBP? If so, please provide an email address and/or phone number.

--

APPENDIX B

PERFORMANCE-BASED PAYMENTS THESIS SURVEY INDUSTRY VERSION

1. Please provide your name (optional).

2. What is the name of your company or organization?

3. What is your position within your company or organization?

4. How familiar are you with Performance-Based Payments (PBP) in Government Contracting?

Very familiar (I've used PBP before or have been involved in their use.)

Somewhat familiar (I know what PBP are and plan to use them.)

Vaguely familiar (I've heard of PBP.)

Unfamiliar (What are PBP?)

5. What type of training have you had in PBP and where did you receive it? (Specific training in PBP, NCMA/NAPM training, online training, organizational training, etc.)

6. Has your company ever used PBP in a DoD contract?

Yes

No

7. Has your company ever been approached about using PBP in a DoD contract?

Yes

No (Go to Question 10)

8. If yes, did you agree to their use?

Yes
 No

9. If no, why not? (Not appropriate for particular contract, preferred traditional progress payments, not necessary for contract, etc.)

10. Did you know that PBP are the preferred method of DoD contract financing and should be the most prevalent form of contract financing by the year 2005?

Yes
 No

11. Has your company ever used PBP in commercial contracts (non-DoD)?

Yes
 No

12. What do you feel are the advantages of using PBP? (Bette Government/contractor cooperation, improved cash flow, reduced oversight and compliance, no advantages, etc.)

13. What do you feel are the disadvantages of using PBP? (Government sets unrealistic milestones, traditional Progress Payments are better/easier, not appropriate for all contracts, no disadvantage, etc.)

[Redacted]

14. May I contact you for additional information or questions concerning the use of PBP? If so, please provide an email address and/or phone number.

[Redacted]

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