Incentive Plan

for the

SPAWAR

Follow-On Installation Services Contracts

for

Worldwide Command, Control, Communications, Computer, Intelligence, Surveillance and Reconnaissance (C4ISR) Installations

27 July 2010

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Table of Contents

List of Figures

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1 Introduction

According to OMB Memorandum for Chief Acquisition Officers and Senior Program Executives dated 4 December 2007, "Awards must be tied to demonstrated results, as opposed to effort, in meeting or exceeding specified performance standards." It also states, "Incentive fees must be predetermined in writing and processes for awarding the fees must be included or cross-referenced in the acquisition plan (see FAR 7.105(b)(4)(i)). This incentive fee plan should include standards for evaluating contractor performance and appropriate incentive fee amounts. When considering the incentive fee arrangement, the plan should distinguish between earning potential for satisfactory versus excellent performance. Metrics should clearly describe what is required and at what point a contractor is considered successful."

2 Concept

This incentive plan is designed to provide incentives based on both the contractor's overall performance and the contractor's performance on individual tasks.

2.1 Overall Performance Incentive Concept

Unsatisfactory overall performance in the area of cost, schedule, quality of work, or small, disadvantaged, and women-owned business participation will, in most cases, result in limiting opportunities for obtaining new work. This is because contractor performance problems are often at least partially caused by their taking on more work than they are equipped to handle. This plan will provide the Government the option to limit the amount of new work assigned to contractors who fail to meet the performance measures specified in this document based on an evaluation of all work completed during a six-month period. When this option is exercised, the limitation method chosen will be up to the discretion of the contracting officer and will be designed to improve performance while maintaining acceptable levels of competition. In most cases, poor overall performance will limit the amount of future work awarded until the contractor provides a remediation plan that, in the judgment of the Government Contracting Officer, will eliminate the root cause of the poor performance and Government surveillance indicates that current performance is satisfactory. In addition, if small, disadvantaged, and women-owned business participation goals are not met, the remediation plan will include commitments for minimum participation of such businesses on future task orders.

2.2 Individual Task Order Performance Incentive Concept

The amount of incentive fee awarded for any task will be solely dependent upon the contractor's performance of that task. This incentive plan is designed to allow the Government to tailor incentives based upon the relative importance of schedule, cost, and quality performance factors. The relative performance of the subfactors (or performance aspects) that comprise the quality and schedule factors will be used to further tailor the incentives. Cost will always be incentivized on individual task orders, and cost will be the determining factor for at least 25% of the incentive fee, and for as much as 100% of the incentive fee – as long as schedule and quality are at least satisfactory. If schedule or quality performance is less than satisfactory, the amount of the incentive fee for cost performance will be reduced or eliminated. Similarly, if cost or quality performance is less than satisfactory, the amount of any incentive fee for schedule performance will be

reduced or eliminated – and if cost or schedule performance is less than satisfactory, the amount of any incentive fee for quality performance will be reduced or eliminated. The purpose of this is to ensure that incentivizing one performance factor (e.g., cost) does not provide an incentive to sacrifice acceptable performance in other areas (e.g., quality and schedule).
Note: The reader is encouraged to experiment with the Incentive Plan Excel Spreadsheet provided with this incentive plan to gain a full understanding of the effects of different weighting of performance factors and different levels of quality, schedule, and cost performance on incentive fees.

3 Overall Performance Evaluation and Incentives

Overall quality, schedule, cost, and Small, Disadvantaged, and Women-Owned Business Participation performance will be evaluated over six-month evaluation periods.
Enclosure (3) of the Quality Assurance Surveillance Plan (QASP) is the *Overall Contract Performance Requirements Summary Chart*. This chart lists the areas that will be evaluated, provides a summary definition of acceptable performance in these areas, provides a summary explanation of how the performance will be measured, and describes the incentives applied to each evaluation factor. The following paragraphs provide deeper definitions and contain other clarifying information to further understanding of the plan to evaluate overall performance.

3.1 Definition of Acceptable Overall Quality Performance

Enclosure (3) of the QASP defines acceptable overall quality performance as "No Individual Task Orders show a Quality Performance Rating of UNSAT." The Quality Performance Rating for any individual task order is determined by the weighted average of the performance ratings assigned to each of the performance aspects listed in enclosure (1) of the QASP. The performance aspects that will be weighted to determine the rating are:

a. SOVT Functional Performance (does not include workmanship)
b. Workmanship Quality (The Stage 1 and Stage 2 Inspections, Tests, and Checks defined in the SPAWAR System Operational Verification Test (SOVT) Preparation and Execution Guide (SPEG) for Ship, Shore, and Submarine Installations are considered workmanship issues.)
c. CORN Quality
d. Earned Value Management (EVM) Reporting Accuracy
e. Original Design Drawing (e.g., IDPs and SIDs) Quality

3.2 Definition of Acceptable Overall Schedule Performance

Enclosure (3) of the QASP defines acceptable schedule performance as "No Individual Task Orders show a Schedule Performance Rating of UNSAT." The Schedule Performance Rating for any individual task order is determined by the weighted average of the performance ratings assigned to each of the performance aspects listed in enclosure (2) of the QASP. The performance aspects that will be weighted to determine the rating are:

a. Meeting Schedule for Completion of Production Work
b. Meeting Schedule for Completion of All Work

3.2.1 Definition of Production Work

Production work is defined as the physical installation work and routine inspections that occur prior to the start of SOVT. In includes, when applicable:

a. Mounting of equipment
b. Installation of cables (includes termination of cables and full attachment to equipment when applicable (full attachment includes tightening of attaching mechanism (e.g., retaining screws))
c. Installation of cable pathways
d. Grounding and Bonding
e. The application of corrosion protection (e.g., no-ox grease)
f. Sealing bulkhead or wall penetrations (includes firestopping)
g. Applying cable ties so that cables present a neat appearance, proper bend radius is maintained, and trimming of ties is completed, and cable performance is not degraded.
h. All required labeling including labeling of cabinets, racks, cables, equipment, patch appearances, and cables.
i. Completion of continuity checks on all copper cables
j. Installation/replacement of floor matting and insulation
k. Painting
l. Clean-up (sweeping, vacuuming, etc.)
m. Removal of abandoned cable (cable with no current or planned future use whose prior function has been replaced as a result of the installation)
n. Disposal of removed equipment and material (cable).
o. Contractor quality assurance inspection

3.2.2 Definition of Production Work Complete for Scheduling Purposes

The degree of completeness of the production work will not always be accurately determined prior to the completion of the SOVT. Therefore, Production Work is considered complete for scheduling performance measurement purposes when:

a. The Government SHIPSUP, NTR, PE, OSGR, (See the QASP for a description of the responsibilities of these individuals.) or another individual identified on the task order as requiring notification has been notified that the production work is complete, has passed the contractor's inspection process and is ready for Government Inspection.
b. The Government representative has had a reasonable opportunity (typically 5 working days) to inspect the work and to note any discrepancies, and
c. All discrepancies documented by the Government Representative during the initial Government inspection are corrected within 24 hours of notification and this has been verified by the Government.

3.2.2.1 Discussion of Production Work Complete for Scheduling Purposes

The fact that production work has been counted as complete for scheduling purposes shall not relieve the contractor of the responsibility to correct any defects in material or workmanship discovered during the reinspection or SOVT process.

3.2.3 Definition of "All Work"

All work is defined as the completion of all work required under the task order. For a typical installation, this would include the previously discussed production work, the submittal of final as-built drawings, and a certain amount of SOVT support. This includes the correction of any discrepancies noted on a signed SOVT document, Installation Completion Report, or Alteration Completion Report that are the responsibility of the Contractor.

3.2.3.1 Discussion of "All Work" Complete for Scheduling Purposes

All work is considered complete for scheduling purposes when the contractor has fulfilled all of their responsibilities under the task order.

3.3 Definition of Acceptable Overall Cost Performance

Enclosure (3) of the QASP defines acceptable performance in the Cost Performance area as "The contractor completes more than 90% of tasks within the target cost specified in the task order and the sum of cost overruns and underruns does not exceed 5% of total costs."

3.4 Definition of Acceptable Small Business Participation

Throughout this section, the phrase "small business" is defined to include "small business, HUBZone small business, small disadvantaged business, women-owned small business, veteran-owned small business, and service-disabled veteran-owned small business concerns." Throughout this section, the "contractor's goals" are defined as the minimum percentages of both overall small business participation – and specific small business category participation – contained in the contractor's approved "Subcontracting Plan for small business, HUBZone small business, small disadvantaged business, women-owned small business, veteran-owned small business, and service-disabled veteran-owned small business concerns." Enclosure (3) of the QASP defines acceptable performance in the small business participation area as meeting the following:

a. During the first six months of performance under the contract, the contractor attains at least 60% of its goal for overall small business participation.
b. During its first 12 months of performance under the contract, the contractor attains at least 70% of its goal for overall small business participation, and attains at least 60% of its goal for each of the following specific categories of small business:
    1) Small Disadvantaged Business
    2) Women-Owned Small Businesses
    3) Veteran-Owned Small Businesses
    4) Service-Disabled Veteran-Owned Small Businesses
    5) HUBZone Small Businesses and Historically Black Colleges or Universities and Minority Institutions
c. During its first 18 months of performance under the contract, the contractor attains at least 80% of its goal for overall small business participation and attains at least 70% of its goal for each of the specific categories of small business listed previously in Paragraph 3.4.b.
d. During its first 24 months of performance under the contract, the contractor attains at least 90% of its goal for overall small, disadvantaged, and women-

owned business participation and at least 80% of its goal for each of the specific categories of small, disadvantaged, and women-owned business listed previously in Paragraph 3.4.b.

e. During its first 30 months of performance under the contract and beyond, the contractor meets all of its goals for small business participation.

4 Individual Task Performance Incentives

Incentive fees will be awarded on an individual task basis. The incentive fee awards will be based on a combination of cost, schedule, and quality performance ratings. The amount that each rating affects the determination of the incentive fee will depend upon:

a. The relative weight assigned to the importance of each factor (quality, schedule, and performance)

b. Whether the performance of any factor is marginal or unsatisfactory. (Marginal performance ratings for any one factor (cost, quality, or schedule) will result in a 50% reduction in any fee earned for performance in the other areas. Unsatisfactory performance ratings for any one factor (cost, quality, or schedule) will result in the elimination of any fee earned for performance in the other areas.)

4.1 Incentive Fee Calculations and Limitations

Incentive Fees will be calculated using the Incentive Plan spreadsheet developed for this purpose. The spreadsheet is in Microsoft Excel format and contains five worksheets. The first three worksheets are used to perform the calculations needed to determine incentive fees. The two other worksheets are used to perform Point of Total Assumption (PTA) calculations and to illustrate how the PTA can be affected by the use of incentives based on factors other than costs. PTA calculations do not affect incentive awards in any way. The three worksheets that are used to determine incentive fees are the *Incentive Fee Calculations* worksheet, the *Quality & Schedule Scores* worksheet, and the *Share Ratios & Fees* worksheet. The function of the *Quality & Schedule Scores* worksheet is to calculate (weighted average) Quality and Schedule performance scores and to feed these scores to the *Incentive Fee Calculations* worksheet. The function of the *Share Ratios & Fees* worksheet is to input any changes to the share ratios, target fee, and maximum incentive fees and to feed these values to the *Incentive Fee Calculations* worksheet. The *Incentive Fee Calculations* worksheet is used to input the type of task order, target and actual costs, ceiling price, and the weights assigned to cost quality and schedule factors. The *Incentive Fee Calculations* worksheet also receives inputs from other spreadsheets and calculates the incentive amounts to be awarded. The Incentive Plan spreadsheet limits the maximum incentive fee to 15% of the target cost on Cost Plus Incentive Fee (CPIF) task orders. This percentage also affects the quality and schedule incentive fees that be awarded on FPIF task order. The theoretical maximum incentive fee on a Fixed Price Incentive (Firm Target) (FPIF) task is 57% of the target cost when cost is the only factor incentivized. This is based on a theoretical actual cost of zero dollars. In this case, the contractor would receive the target fee (7%) plus half (50%) of the target cost. This is because FAR Subpart 16.403-1 - *Fixed-price incentive (firm target) contracts* - does not allow a profit ceiling. Real-world fees will not approach this value. Figure 1 shows how cost savings are shared differently under CPIF and FPIF task orders. The figure assumes that the incentive fee will be based solely on costs. If quality and schedule factors are assigned any weight, or are marginal or unsatisfactory, the incentive fee values shown on

the figures will not be valid. Figure 2 shows an incentive fee graph for a case where non-cost factors outweigh cost factors.

4.1.1 Cost Performance Rating Determination

The adjectival and corresponding numerical cost performance ratings are determined by a spreadsheet calculation that uses actual cost and target cost data as inputs. These ratings do not affect the amount of cost incentive fee, but they will affect the amount of any quality or schedule fee if cost performance turns out to be less than satisfactory. The calculation is a five step process:

Step1: The spreadsheet checks to see if the actual costs are more than 14% above the target costs, and if they are, then cost performance is UNSAT (Numerical Rating = 1). If not, it's on to the next step.

Step 2: The spreadsheet checks to see if the actual costs are more than 5% above the target costs, and if they are, then cost performance is MARGINAL (Numerical Rating = 2). If not, it's on to the next step.

Step 3: The spreadsheet checks to see if the cost savings are less than or equal to 5% of the target costs, and if they are, then cost performance is SATISFACTORY (Numerical Rating = 3). If not, it's on to the next step.

Step 4: The spreadsheet next checks to see if the cost savings are less than 16% of the target costs, and if they are, then cost performance is VERY GOOD (Numerical Rating = 4).

Step 5: If a value has not been assigned by the previous steps, the cost performance is OUTSTANDING (Numerical Rating = 5).

4.1.1.1 Impact of Quality and Schedule Performance on Cost Incentives

If either Schedule or Quality performance is determined to be Unsatisfactory, no incentive fee will be awarded for the task order no matter how highly the cost performance is rated. If either Schedule or Quality performance is determined to be Marginal, the incentive fee earned for cost performance will be only half what it would be if both quality and schedule performance were at least satisfactory.

4.1.2 Quality and Schedule Performance Rating Determination

The calculations performed by the *Quality & Schedule Scores* worksheet (See Figure 3.) are simple weighed averages based on the scores and weights entered for each subfactor. The Quality subfactors are from the *Performance Aspect* column of Enclosure (1) of the QASP (*Individual Task Order Quality PRS Chart*) and are listed in Section 3.1 of this document. The schedule subfactors are from the *Performance Aspect* column of Enclosure (2) (*Individual Task Order Schedule PRS Chart*) of the QASP and are listed and defined in Section 3.2 of this document. The numerical score awarded for unsatisfactory performance of any subfactor is one (1). The numerical score awarded for satisfactory performance is three (3). The numerical score awarded for outstanding performance is five (5). The weighted average of the numerical scores of the subfactors is used to determine whether the overall factor performance is Unsatisfactory, Marginal, Satisfactory, Very Good, or Outstanding by using the following table.

Performance Rating Definitions	
Numerical Rating	**Adjectival Rating**
4.5 ≤ Rating ≤ 5.0	Outstanding
3.5 ≤ Rating < 4.5	Very Good
2.5 ≤ Rating < 3.5	Satisfactory
1.5 ≤ Rating < 2.5	Marginal
Rating <1.5	Unsat or Unsatisfactory

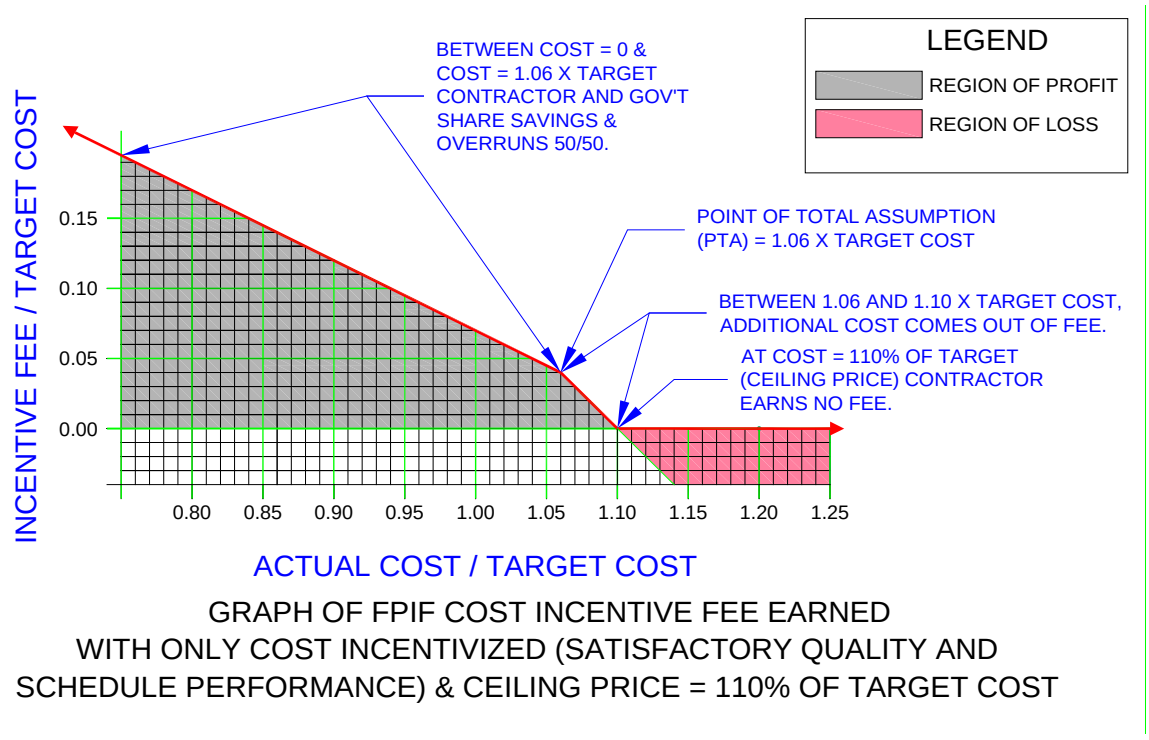
Table 1

4.1.2.1 Impact of Cost and Schedule Performance on Quality Incentives

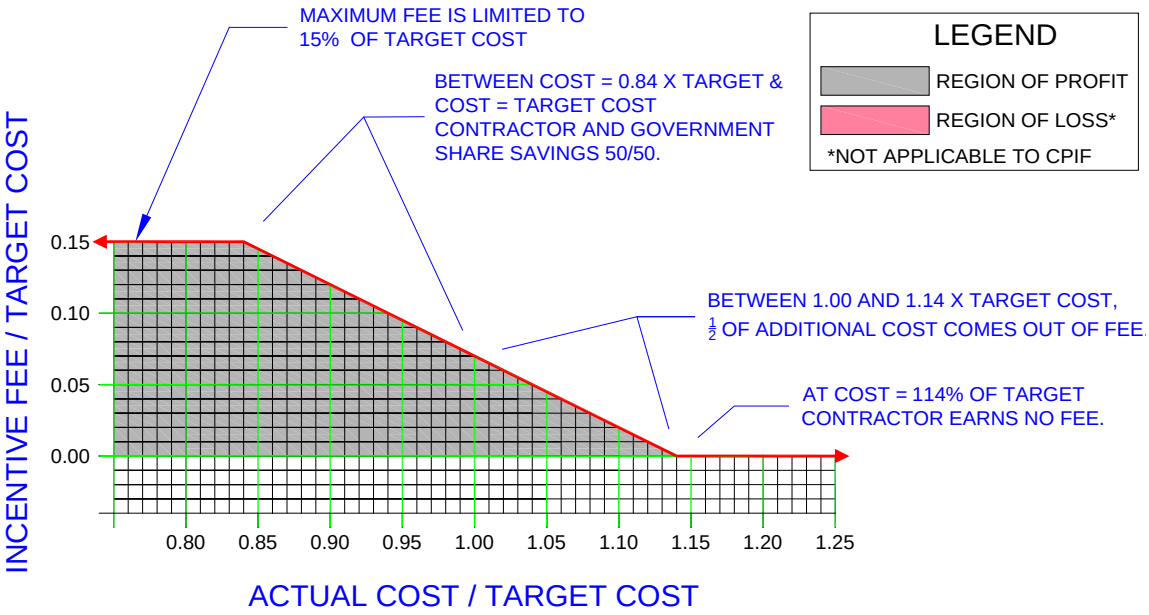
If either Cost or Schedule performance is determined to be Unsatisfactory, no incentive fee will be awarded for the task order no matter how highly the Quality performance is rated. If either Schedule or Cost performance is determined to be Marginal, the incentive fee earned for Quality performance will be only half what it would be if both cost and schedule performance are (at least) satisfactory.

4.1.2.2 Impact of Quality and Cost Performance on Schedule Incentives

If either Quality or Cost performance is determined to be Unsatisfactory, no incentive fee will be awarded for the task order no matter how highly the Schedule performance is rated. If either Quality or Cost performance is determined to be Marginal, the incentive fee earned for Schedule performance will be only half what it would be if both cost and schedule performance are (at least) satisfactory.

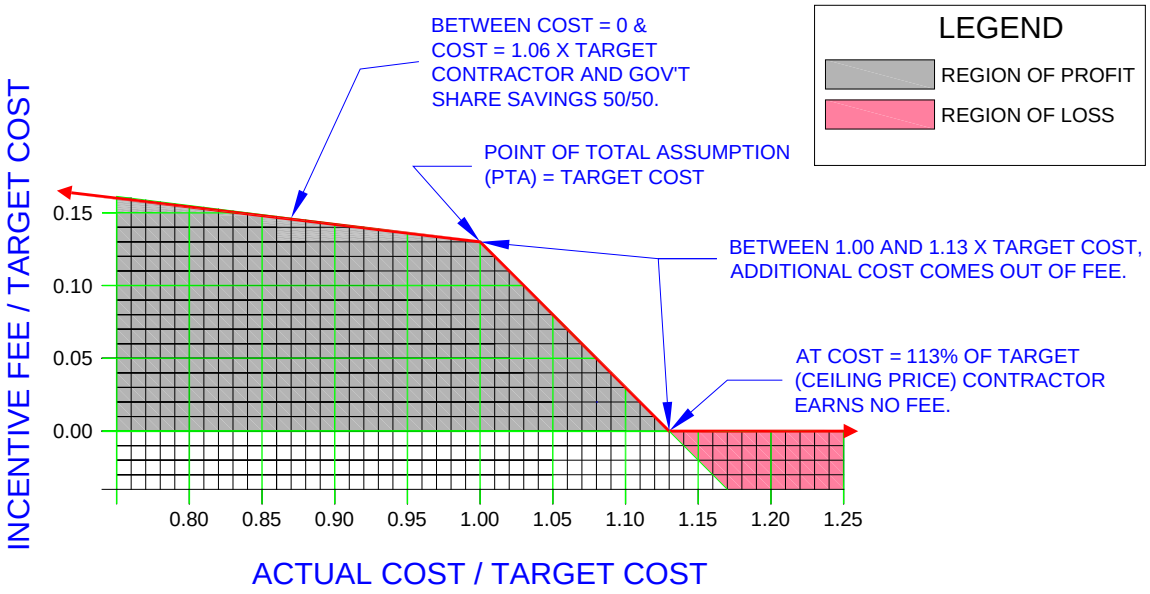


GRAPH OF FPIF COST INCENTIVE FEE EARNED
WITH ONLY COST INCENTIVIZED (SATISFACTORY QUALITY AND
SCHEDULE PERFORMANCE) & CEILING PRICE = 110% OF TARGET COST



GRAPH OF CPIF COST INCENTIVE FEE EARNED
WITH ONLY COST INCENTIVIZED AND SATISFACTORY COST
AND SCHEDULE PERFORMANCE

Figure 1 – CPIF and FPIF Incentive Fee Graph Comparison



GRAPH OF FPIF COST INCENTIVE FEE EARNED WITH MAXIMUM NON-COST INCENTIVES (OUTSTANDING QUALITY AND SCHEDULE PERFORMANCE) & CEILING PRICE = 113% OF TARGET COST

Figure 2 – FPIF Incentive Fee Graph with Maximum Non-Cost Incentives

Quality Subfactors	Score	Weight	Score * Weight
SOVT Functional Performance	1	40	40
Workmanship Quality	3	20	60
CORN Quality	5	10	50
Earned Value Management (EVM) Reporting Accuracy	5	10	50
Original Design Drawing Quality	3	20	60
Totals		100	260
Quality Score (Weighted Average)	**2.6**		

Schedule Subfactors	Score	Weight	Score * Weight
Meeting Schedule for Completion of Production Work	3	50	150
Meeting Schedule for Completion of All Work	1	50	50
Totals		100	200
Schedule Score (Weighted Average)	**2**		

Figure 3 – Weighted Average Example

4.2 Incentive Fee Calculations

The *Incentive Fee Calculations* worksheet of the Incentive Plan Excel spreadsheet is used to calculate the total incentive fee awarded to the contractor. This fee appears in cell F30 of the spreadsheet and is the sum of the incentive fees awarded for Cost, Schedule and Quality performance, with any reductions required by the presence of a FPIF cost ceiling. See Figure 4 for a partial view of this worksheet.

4.2.1 Quality Incentive Fee Calculation Details

The Quality incentive fee appears in **cell F26** and is calculated using the following formula:

=IF(D26="Unsat",0,(IF(I22=TRUE,0,(IF(I23=TRUE,I25*B26*0.5,I25*B26)))))

The "D26="Unsat"" part of the formula means that if quality performance is unsatisfactory, the incentive fee will be zero.

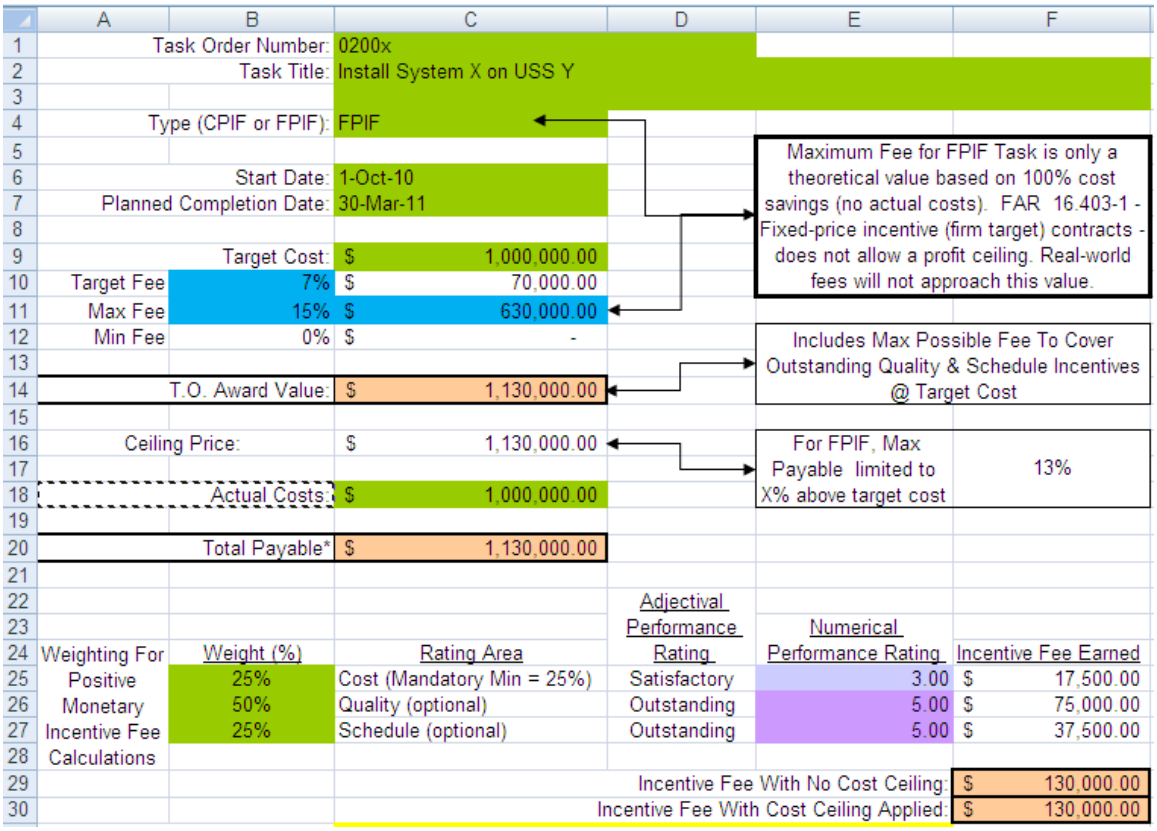
The "IF I22=TRUE, 0" part of the formula means that if performance in any **other** area is unsatisfactory, the incentive fee will be zero.

The "I23=TRUE,I25*B26*0.5" part of the formula means that if performance in any **other** area is marginal, the quality incentive fee will be reduced by 50%.

The "I25*B26" part of the formula applies when the performance in other areas is satisfactory or better and is the weight of the Quality factor multiplied by the (maximum allowable) Quality fee in cell I25.

The value in cell I25 is what the incentive fee would be if it were based solely on Quality. It is calculated using the following formula:

=IF((E26-3)<0,(Target_Fee+(E26-3)*Target_Fee/2)*C9,(Target_Fee+(E26-3)*(TO_MaxFee-Target_Fee)/2)*C9)
This produces a number that is the target fee percentage (Default/maximum value is 7%) of the target cost (C9) plus or minus a value that is based on the quality rating that appears in cell E26 (the weighted average quality rating). If the quality rating is below 3, the formula returns a number that is less than the target fee percentage. The formula will return a minimum value of zero when the Quality rating is 1 and a maximum value (based on the task order Maximum Fee percentage, for which the default/maximum value is 15%) of target cost when the Quality numerical rating is 5.



	A	B	C	D	E	F
1	Task Order Number:		0200x			
2	Task Title:		Install System X on USS Y			
3						
4	Type (CPIF or FPIF):		FPIF			
5						
6	Start Date:		1-Oct-10			
7	Planned Completion Date:		30-Mar-11			
8						
9	Target Cost:		$ 1,000,000.00			
10	Target Fee	7%	$ 70,000.00			
11	Max Fee	15%	$ 630,000.00			
12	Min Fee	0%	$ -			
13						
14	T.O. Award Value:		$ 1,130,000.00			
15						
16	Ceiling Price:		$ 1,130,000.00			
17						
18	Actual Costs:		$ 1,000,000.00			
19						
20	Total Payable*		$ 1,130,000.00			
21						
22				Adjectival		
23				Performance	Numerical	
24	Weighting For	Weight (%)	Rating Area	Rating	Performance Rating	Incentive Fee Earned
25	Positive	25%	Cost (Mandatory Min = 25%)	Satisfactory	3.00	$ 17,500.00
26	Monetary	50%	Quality (optional)	Outstanding	5.00	$ 75,000.00
27	Incentive Fee	25%	Schedule (optional)	Outstanding	5.00	$ 37,500.00
28	Calculations					
29					Incentive Fee With No Cost Ceiling:	$ 130,000.00
30					Incentive Fee With Cost Ceiling Applied:	$ 130,000.00

Maximum Fee for FPIF Task is only a theoretical value based on 100% cost savings (no actual costs). FAR 16.403-1 - Fixed-price incentive (firm target) contracts - does not allow a profit ceiling. Real-world fees will not approach this value.

Includes Max Possible Fee To Cover Outstanding Quality & Schedule Incentives @ Target Cost

For FPIF, Max Payable limited to X% above target cost: 13%

Figure 4 – Incentive Fee Calculations Tab Partial View

4.2.2 Schedule Incentive Fee Calculation Details

The Schedule incentive fee appears in cell F27 and is calculated using the following formula:

=IF(D27="Unsat",0,IF(J22=TRUE,0,(IF(J23=TRUE,I28*B27*0.5,I28*B27))))
The above formula operates in a way that is basically identical to the formula for calculating the Quality incentive fee.

4.2.3 Cost Incentive Fee Calculation Details

The Cost Incentive Fee appears in cell F25 and is calculated using the following formula:

=IF(I18=TRUE,0,(IF(I19=TRUE,I4*B25*.5,I4*B25)))

The “IF I18=TRUE, 0” part of the formula means that if performance in any area is unsatisfactory, the incentive fee will be zero.

The “IF(I19=TRUE,I4*B25*.5” part of the formula means that if performance in any **other** area is marginal, the cost incentive fee will be reduced by 50%.

The I4*B25 part of the formula applies when the performance in other areas is satisfactory or better and is the weight of the Cost factor multiplied by the calculated (maximum allowable) Cost Incentive Fee in cell I4.

The value in cell I4 is what the incentive fee would be if it were based solely on Cost. It is calculated using the following formula:

=IF((I3+C10)>C11,C11,IF((I3+C10)<0,0,(I3+C10)))

The "IF((I3+C10)>C11" part of the formula means that if the sum of the contractor's share of the cost savings from target cost (I3) plus the target fee (C10) is greater than the maximum fee, this value is set to the maximum fee (C11).

The "IF((I3+C10)<0,0" part of the formula means that the minimum incentive fee is zero.

The "(I3+C10)" part near the end of the formula means that if maximum or minimum fee limits do not apply, the fee will be equal to the target fee plus or minus the contractor's share of the cost savings or additional costs.

The value in cell I3 is the contractor's share of any cost savings (from target) or additional cost. Currently, this value is determined by the following formula:

=IF((C18>C9), (C9-C18)*K_Share_Above_Tgt, (C9-C18)*K_Share_Below_Tgt)
If C18>C9, the actual costs are greater than the target cost and this value isa negative number that is the difference between the Target Cost (C9) and the Actual Cost (C18) multiplied by the contractor's share of the extra cost. The default and minimum value of the contractor's share is 50%, but a higher value can be obtained by entering a value below 50% for the *Task Order Government Share of Costs Above Target Cost* variable shown in the *Share Ratios & Fees* worksheet. (The contractors's share is equal to: 1minus the Governments share.)

If C18 is not greater than C9, the actual cost is less-than-or-equal-to the target cost, and this value is zero or a positive number multiplied by the contractor's share of the cost savings. The default and maximum value of the contractor's share is 50%, but a lesser value can be obtained by entering a value above 50% for the *Task Order Government Share of Savings Below Target Costs* variable shown in the *Share Ratios & Fees* worksheet.

The numerical cost performance rating and its associated adjectival description are used to determine whether a low cost performance will impact schedule and quality incentives on individual task orders. It is determined by a spreadsheet calculation that uses the actual and target cost data as inputs. This value appears in cell E25 of the Incentive Fee Calculations worksheet, but it originates in cell I9. The formula for the value in I9 is:

=IF((C9-C18)<-I11*C9,1,IF((C9-C18)<-I13*C9,2,IF((C9-C18)<=I13*C9,3,IF((C9-C18)<I15*C9,4,5))))
The formula represents a five step process:

Step1: The "IF((C9-C18)<-I11*C9,1" part of the formula means that the spreadsheet first checks to see if the actual costs are more than 14% (the fraction in cell I11) above the target costs, and if they are, then cost performance is UNSAT (=1). If not, it's on to the next step.
Step 2: The "IF((C9-C18)<-I13*C9,2" part of the formula means that the spreadsheet next checks to see if the actual costs are more than 5% (the fraction in cell I13) above the target costs, and if they are, then cost performance is MARGINAL (=2). If not, it's on to the next step.
Step 3: The "IF((C9-C18)<=I13*C9,3" part of the formula means that the spreadsheet next checks to see if the cost savings are less than or equal to 5% (the fraction in cell I13) of the target costs, and if they are, then cost performance is SATISFACTORY (=3). If not, it's on to the next step.
Step 4: The "IF((C9-C18)<I15*C9,4" part of the formula means that the spreadsheet next checks to see if the cost savings are less than 16% (the fraction in cell I15) of the target costs, and if they are, then cost performance is VERY GOOD (=4).
Step 5: The 5 at the end of the formula means that if a value has not been assigned by the previous steps, the value of 5 is assigned meaning that and the cost performance is OUTSTANDING.

5 Total Payable Calculations

The total amount payable to a contractor under a task will be calculated using the previously discussed Incentive Plan spreadsheet *Incentive Fee Calculations* worksheet. If the task order is a Cost Plus Incentive Fee (CPIF) task order, the spreadsheet adds the actual costs and the calculated incentive fees to determine the payable amount. If the task order is a Fixed Price Incentive (Firm Target) (FPIF) Task Order, the spreadsheet caps the total amount payable so that it will not exceed the ceiling price. The maximum value for a ceiling price for a FPIF task order issued under the contract will be 113% of target cost. Ceiling prices for most task orders issued under this contract are expected to range between 110% and 113% of the target cost depending upon the perceived risk and the size of the non-cost incentives. Cell C4 on the spreadsheet is used to input whether the Task Order is CPIF or FPIF. Figures 1 and 2 show incentive fee graphs for three different incentive fee arrangements.

6 Point of Total Assumption (PTA) Calculations

The PTA is the cost point of a fixed price plus incentive firm target (FPIF) task order above which the seller bears all additional cost. **Point of Total Assumption (PTA) calculations do not affect incentive fees or contract costs.** When cost is the only factor that is incentivized, the PTA is fixed and easy to calculate at the time of task order award using a simple formula. When quality and schedule incentives are used, the PTA is dependent upon the amount of the quality and schedule incentives which can suddenly be reduced or eliminated when costs exceed thresholds for marginal or unsatisfactory

performance. The Incentive Plan spreadsheet provides a *PTA Calculator* worksheet and a *PTA Example* worksheet to explain the effects of this incentive plan on the PTA and to facilitate the extraction of PTA information if needed to respond to management requests.

6.1 Derivation of the PTA Formula

When the actual costs of the task order reach the point at which the sum of the actual costs and the Incentive Fees (IF) equals the ceiling price, then the Actual Costs (AC) have reached the Point of Total Assumption. This can be expressed mathematically as follows:

1) AC + IF = CP when PTA = AC.

This formula holds true as long as the incentive fees do not disappear before the ceiling price is reached. By subtracting IF from both sides of the equation we get:

2) AC = CP – IF

The incentive fee total (IF) is equal to the target fee (target price (TP) minus the Target Cost (TC)) multiplied by the Cost Weighting Factor (CWF) plus the difference between the Target Cost (TC) and the Actual Cost (AC) multiplied by the Cost Weighting Factor (CWF) multiplied by the contractor's share (CS) plus the Quality Incentive Fee (QF) plus the Schedule Incentive Fee (SF). This can be expressed mathematically as follows:

3) IF = [(TP – TC) * CWF + (TC – AC)*CS*CWF + SF + QF]

Formulas 1 and 2 above can be combined to obtain:

4) AC = CP – TP*CWF + TC*CWF – TC*CS*CWF +AC*CS*CWF – QF – SF

Subtracting AC*CS*CWF from both sides leads to:

5) AC – AC*CS*CWF = CP – TP*CWF + TC*CWF – TC*CS*CWF – QF – SF

6) (1 – CS*CWF)*AC = CP – TP*CWF + TC*(CWF – CS*CWF) – QF – SF

7) $$AC = \frac{CP - TP*CWF + TC*CWF(1 - CS) - QF - SF}{(1 - CS*CWF)}$$

Since (1 – CS) = GS (Government's Share):

8) $$PTA = AC = \frac{CP - TP*CWF + TC*CWF*GS - QF - SF}{(1 - CS*CWF)}$$

If Quality and Schedule are not incentivized, then CWF = 1, QF= 0, SF = 0, and the formula reduces to:

9) $$PTA = AC = \frac{CP - TP + TC*GS}{(1 - CS)}$$

10) $$PTA = AC = \frac{CP - TP + TC*GS}{GS}$$

11) $$PTA = AC = \frac{CP - TP}{GS} + TC$$

6.2 Effect of Marginal Cost Performance on the PTA

When Actual Costs rise more than 5% above target costs, quality and scheduling incentive fees are reduced (because cost performance goes from satisfactory to marginal) so the PTA jumps to a higher value if quality or schedule is incentivised. The Government can use some of the "returned" fee money to offset the increased costs, therefore raising the PTA. When Actual Costs rise to more than 14% above target costs, quality and scheduling incentive fees are eliminated (because cost performance is unsatisfactory), and the PTA jumps again. However, at this point the actual costs are already above the ceiling price so the formulas provided are not applicable.