

DoD ESI White Paper

Software Maintenance Negotiations Best Practices

Practical guidance for negotiating commercial software maintenance agreements in the Department of Defense.



About DoD ESI

The DoD ESI was formed in 1998 by Chief Information Officers at the DoD. To save time and money on commercial software, a joint team of experts was formed to consolidate requirements and negotiate with commercial software companies, resulting in a unified contracting and vendor management strategy across the entire department. Today, DoD ESI's mission extends across the entire commercial IT life-cycle to include IT hardware products and services. DoD ESI has established DoD-wide agreements for thousands of products and services.

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Introduction

Software Maintenance represents a significant portion of the total cost of new software acquisition and over time, represents an even larger portion of the Total Cost of Ownership (TCO) / Life Cycle Cost (LCC) of the system. By negotiating a good price for software and maintenance initially, limiting the annual escalation allowed on software maintenance, and managing renewal software maintenance, an organization can save significant cost with no impact on the mission.

This White Paper contains a set of potential actions that can be taken to constrain or even reduce Software Maintenance spending, during initial license acquisition and throughout the life of the system. It is oriented to the Government, although best practices of the commercial sector are frequently referenced.

I. Background

Recurring software maintenance spending is a significant and rising cost in both private and Government organizations. It is not only increasing every year in absolute cost, but also as a percentage of Information Technology (IT) budgets and overall operational budgets. The impact of annual escalation on software maintenance, coupled with the lack of periodic cost/benefit baseline analysis, often leads to an organization paying far more for software maintenance than the benefits received.

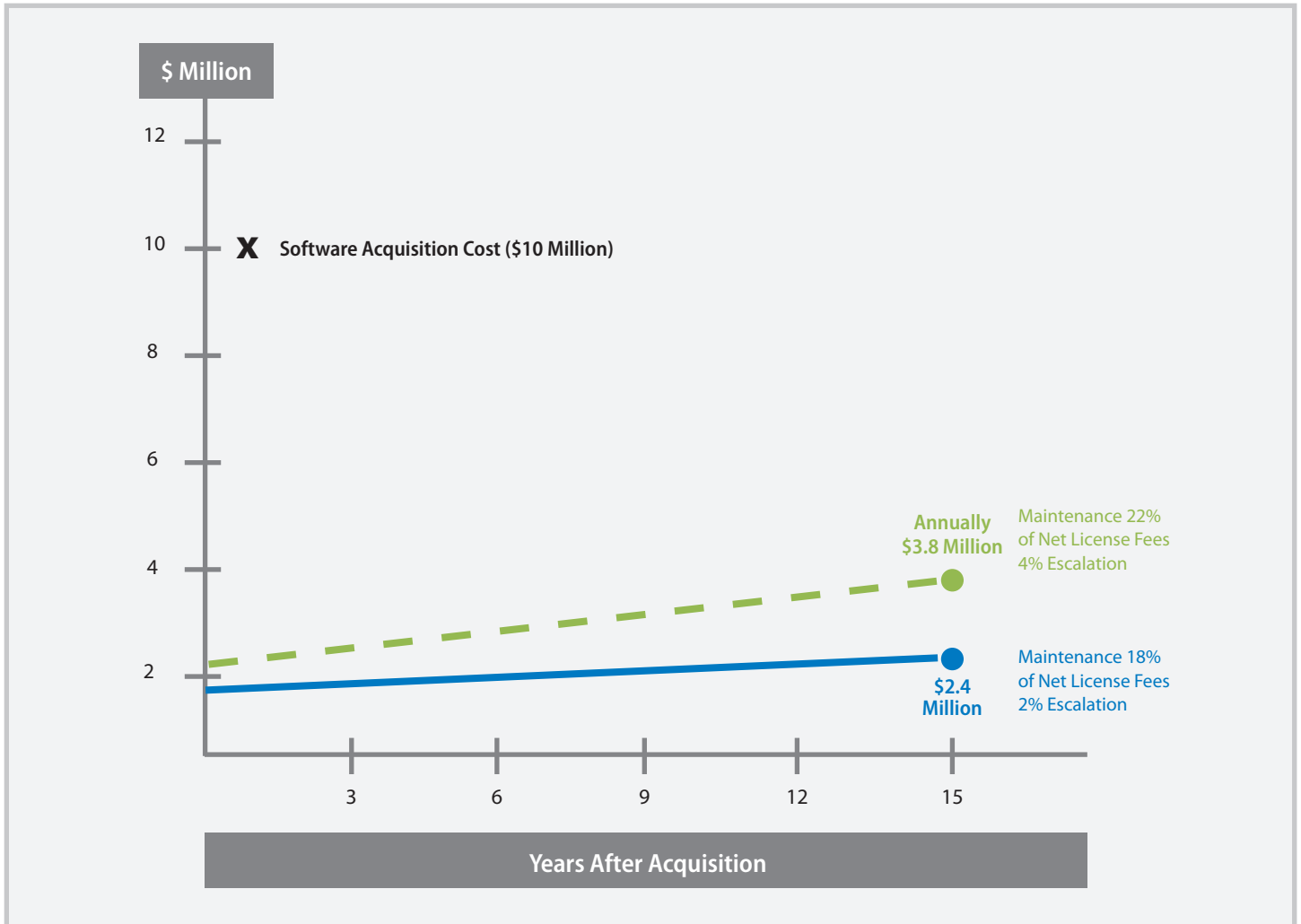
For example, it is common for a Software Publisher to charge 20% or more of net (discounted) license fees for the initial year of software maintenance, then escalate maintenance annually. Under this model, organizations essentially pay for new licenses every five years.

The following table and graph depict the magnitude of annual software spending escalation, and illustrate the savings that can be achieved solely by negotiating maintenance pricing at a lowered percentage of net license fees and with reduced escalation:

Software Maintenance Cost Growth				
Year	List License Fee	60% License Discount	Maintenance 22% of Net License Fees 4% Escalation	Maintenance 18% of Net License Fees 2% Escalation
1	\$25,000,000	\$10,000,000	\$2,200,000	\$1,800,000
2			\$2,288,000	\$1,836,000
3			\$2,379,520	\$1,872,720
4			\$2,474,701	\$1,910,174
5			\$2,573,689	\$1,948,377
6			\$2,676,637	\$1,987,345
7			\$2,783,702	\$2,027,092
8			\$2,895,050	\$2,067,634
9			\$3,010,852	\$2,108,987
10			\$3,131,286	\$2,151,167
11			\$3,256,537	\$2,194,190
12			\$3,386,798	\$2,238,074
13			\$3,522,270	\$2,282,835
14			\$3,663,161	\$2,328,492
15			\$3,809,687	\$2,375,062



In this example, by Year 10, an organization that negotiated Software Maintenance at 22% of Net License Fees with 4% annual escalation is paying approximately \$1M more per year for the exact same software maintenance as an organization that negotiated better terms initially. The cumulative savings over a 15-year lifecycle are greater than \$12M.



The table and graph above illustrate an important point. The hypothetical (yet realistic) figures show that the cost of software maintenance is significant and increases over time. A reduction in maintenance rates (charged as a percentage of net license fees) and a reduction in annual escalation can result in significant savings over the life of the system. The benefit is that savings are generated with no impact to the mission, and can be used to fund other critical requirements that face budget shortfalls.

Two important notes:

First, software publishers use different names and titles to describe their software maintenance offerings, including software maintenance, software support, and software assurance. For the purposes of this paper, the term “software maintenance” is used to represent all such offerings.

Second, while some Software Publishers use resellers to sell software maintenance, all software maintenance is provided by the Publisher, as only the Publisher has access to the software source code.

II. Current Market Conditions

Within the Government, it appears as if far more organizations acquire basic and premium software maintenance or assurance service from the Software Publishers than do commercial concerns. It is not uncommon for Department of Defense (DoD) organizations to cover all licenses at the most advanced level of software maintenance. As a result, this increases the risk that there are millions of dollars of unused or underutilized software maintenance services purchased by the Federal Government every year.

Additionally, the traditional Federal budget process lends itself to continued software maintenance status quo spending as budgets are generally based on prior year spending and often do not employ a bottoms-up, requirements-based assessment of operational needs and corresponding budget. In other words, people tend to budget based on what was spent the prior year, without doing a requirements analysis to determine exactly what is needed each year.

Within the private sector, commercial firms perform cost/benefit and risk analyses regarding the extent of software maintenance coverage. Their focus is to deliver maximum profit while not impacting operations or taking excessive risk. Additionally, while annual budgets are generally prepared based on prior year spending, there is a consistent financial challenge to reduce spending by finding budgetary items that yield less benefit than the associated cost. Private sector firms do not automatically accept that software maintenance is mandatory; they assess risk and the cost versus the benefit on a periodic basis. Within DoD, Services may have a policy that mandates software maintenance, and throughout DoD issues such as Information Assurance and Cyber Security are carefully assessed relative to software maintenance decisions.

Additionally, it must be recognized that Software Publishers are very effective in their protection of software maintenance revenue streams. Publishers know that few, if any, organizations that have implemented enterprise-wide software would consider incurring the cost of going through the difficult process to implement a competitor's product just to achieve lower software maintenance fees. In other words, the Software Publishers have a captive audience and they know that.

III. ROADMAP

We recommend employing the four-phased approach in the DoD ESI Best Value Toolkit to minimize and/or reduce software maintenance costs.

The key to reduce software maintenance costs is to develop a set of facts, data points, and analyses as the basis of your negotiating position. The following roadmap can be used to prepare for negotiations most effectively:



1. Gather Requirements

The first step in managing software maintenance costs is to take an analytical approach to requirements and cost of software maintenance. The following steps should be taken prior to first entering or renewing a contract with a vendor/Software Publisher for software maintenance, and should be performed well in advance of negotiations.

Action / Step	Description
1.1 Establish the Requirements Team	
<p>Establish a multi-functional team to assess the absolute software maintenance requirements for that specific software. This assessment should include an understanding of Department Policy and of critical issues such as Information Assurance and Cyber Security.</p>	<p>This team should include operational, technical, program management, finance, and budget authority personnel, and be supplemented by acquisition professionals, contracts, and senior management.</p>
<p>The team's primary focus should be to define requirements in two areas:</p>	<p>A. Inventory of Total Software Utilized</p> <p>B. Maintenance Requirements by Operating Unit. For example, requirements for mission critical and/or war fighting systems may be more detailed and stringent than requirements for administrative back-office systems.</p>
1.2 - Take Inventory of the Total Software Utilized	
<p>The licensing organization must have an understanding of all software that they are using and compare actual use to their licensed/authorized quantities.</p>	<p>This is part of an overall Software Asset Management (SAM) program.</p>
<p>This comparison will yield one of three situations:</p>	<p>1. You use a quantity that is less than authorized (you have more than you need)</p> <ul style="list-style-type: none"> • This immediately becomes a target for software maintenance cost savings. • You need to ensure that your future needs will not require use of the excess software, but once confirmed you can identify the unused software (often referred to as "shelf-ware") as an area for potential cost savings. • If you identify future need or other DoD organization's need for the excess software, investigate your Transfer Rights (as defined in the EULA) to another Department or DoD entity with emerging requirements.

Action / Step	Description
	<p>2. You use a quantity that is equal to what is authorized.</p> <ul style="list-style-type: none"> This affirms your expected usage. <p>3. You use a quantity that is more than authorized.</p> <ul style="list-style-type: none"> Using more software than is authorized is an unauthorized commitment and must be addressed internally and with the vendor/Software Publisher.

1.3 - Define Maintenance Requirements by Operating Unit

<p>The team must understand the software maintenance offerings of the publisher:</p> <p>Identify the specific needs of each operating unit.</p>	<ul style="list-style-type: none"> Levels of maintenance What benefits are received at each level What is forgone by not obtaining levels of maintenance, etc. Depending on policy, not all entities using software require the same level of software maintenance, if any at all. Often, one operating unit requires the highest level of software maintenance, while many other operating units do not require as high a level (or any maintenance at all).
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Match the needs to the offerings of the Publisher.

- It is imperative to match the level of software maintenance required by each operating unit to the levels offered by the Publisher, so that specific needs can be identified.
- Too often, organizations buy the highest level of maintenance needed, ignoring that only a portion of their organization requires that level, and therefore ends up paying a premium above actual requirements.
- All licenses currently receiving premium support that is not required should be identified as targets for software maintenance cost savings.
- By identifying only software that is in use, and matching to minimum requirements, an organization is often able to consider reducing the amount of maintenance required.

2. Gather Data from Relevant Contract Vehicles

Action / Step	Description
2.1 Gather Data from Relevant Contract Vehicles	
Identify one or more existing contract vehicles.	<ul style="list-style-type: none"> Review DoD ESI BPAs, GSA Schedule 70, EULAs, BPAs, ELAs, IDIQs, or Task Orders where first year Software Maintenance list prices are presented. These contracts may be directly with the Publisher or with resellers.
Using the discounted prices from these agreements, extend the prices by the quantities identified in the requirements analysis.	This resulting overall extended price establishes a ceiling price – that is the price of maintenance if all licenses are new and no additional discount other than the baseline prices from referenced agreements are received.

3. Gather Actual Prices Paid

Action / Step	Description
3.1 Gather Actual Prices Paid	
Utilizing the above mentioned contract vehicles, find orders off of those contracts with similar quantities required within your organization and determine the discount from list price offered on that order.	The more data points (i.e. discounted orders) the better, as these data points will be used to determine a range of discounts. This range will help identify a most likely discount which may be obtained through negotiation.
Using these discounts, establish a range and a most likely price (Should Cost) for maintenance renewal.	See Sample Range Table Below

List License Order	Expected Discount from List*	Net License Fees	Maintenance 22% of Net License Fees	Maintenance 18% of Net License Fees
\$7,500	20.0%	\$6,000	\$1,320	\$1,080
\$40,000	30.0%	\$28,000	\$6,160	\$5,040
\$185,000	37.5%	\$115,625	\$25,438	\$20,813
\$750,000	47.5%	\$393,750	\$86,625	\$70,875
\$8,200,000	60.0%	\$3,280,000	\$721,600	\$590,400
\$79,000,000	75.0%	\$19,750,000	\$4,345,000	\$3,555,000
\$147,500,000	85.0%	\$22,125,000	\$4,867,500	\$3,982,500

* rough estimate of mid-point of a range of discounts to expect based on order size

4. Research Industry Data Sources

The ever increasing and high cost of software maintenance is a common problem in almost all organizations, both in the Government and in the private sector. There are several firms that assist organizations with their IT issues, including the cost of software maintenance. These research and advisory services firms may be used to help provide information to support their subscribers with software maintenance issues.

GATHER »

ANALYZE »

STRATEGIZE »

NEGOTIATE »

5. Analyze Cost and Price Data and Determine the Range of Prices Paid

Using the pricing data from existing contract vehicles and from actual prices paid on large orders against those and other contracts, a range of prices paid for the specific maintenance offering required can be established. Since software licenses are acquired over a period of time and the price may decline over that period, it is quite possible that renewal maintenance prices on an existing license (especially after years of escalation), will exceed current market or even contract prices.

The following table references a potential scenario where software maintenance list pricing has decreased from 1999 to 2013, while the price of renewal maintenance initially acquired in 1999 has escalated 4% annually through 2013:

1999 License List Price	60% License Discount	Maint @ 22% NLF in 1999	2013 Maint Price (4% Escalation)	2013 License List Price	22% of List
\$2,000	\$800	\$176	\$305	\$1,000	\$220



In the table above, we see that while list license and maintenance prices have dropped in half since 1999, the escalation on renewal software maintenance (\$305 per unit) now results in a maintenance price higher than current list (\$220 per unit).

Potential savings can be identified by analyzing current prices (both list and market) and comparing them to present renewal prices. It does not make sense when payment for maintenance is greater on existing licenses than current list price.

6. Identify and Evaluate Alternate Maintenance Strategies

Within the private sector, some buyers are very aggressive in managing software maintenance costs while continuing to provide service to their software user community. While most firms have their IT departments manage the basic software maintenance functions including initial distribution, providing uniform updates and upgrades, and handling simple questions and requests, other firms utilize more complex approaches. These approaches (either provided in-house or out-sourced) include:

- solving more complex maintenance issues
- foregoing all software maintenance (“going-naked”) and
- establishing custom pay-per-event premium support from the Software Publisher.

Understandably, this may be more difficult within the Government, where entities must comply with Component or Agency policies, including cyber security policy mandates and risk assessments. However, the fact that private sector firms use these methods should spur some consideration by the Government, especially when the Government is encouraged to employ “Commercial Best Practices”. When considering these options, it is important to remember that all maintenance functions provided cannot infringe on the Publishers Intellectual Property and Source Code, only the Publisher may address these issues. For example, a third-party maintenance provider may write, update and alter interfaces and customer data, but it cannot revise, edit, or update the Publisher’s source code.

7. Estimate the Cost to Re-Acquire Software

Another set of data useful for negotiations is to establish the cost of re-acquiring an entirely new license set to replace the existing software. If there is another software publisher which offers a competing product or capability, it may be a useful negotiating tool to also perform an analysis under the Framework of Life –Cycle Cost (LCC) or Total Cost of Ownership (TCO) of a replacement acquisition. Use of Open Source software and SaaS subscriptions should also be explored if viable alternatives to the required capability. This competitive assessment will provide a total understanding of all options, and will help your negotiation position if the incumbent software maintenance provider becomes aware that you are performing such an analysis. It is important to keep in mind that this negotiating tool may have limited affect if the conditions do not exist for a viable product replacement.

All such analyses should be performed using LCC/TCO methodology – capturing all costs over the life cycle of the software acquired, while comparing them to the anticipated cost stream of the existing software implementation, including recurring software maintenance. One excellent source of tools and documentation of TCO Analysis as applied to IT and Software Acquisition can be found in the DoD ESI Best Value Toolkit accessible at the following link: <http://www.esi.mil/bestvaluetoolkit/index.html>

Linking Warranty and Maintenance Requirements on New Acquisitions

Software Warranties are very different than warranties of physical products such as Hardware. Discussion of Software Warranties is a complicated and different topic than the discussion of Software Maintenance; however one aspect of a Software Warranty is that it may include a limited period of Software Maintenance at no additional charge.

To maximize the value of Software Maintenance spending, the buyer should be aware of Warranty provisions that address any period of Software Maintenance, and try to time the start of paid Software Maintenance to best take advantage of any Warranty provisions and of the actual implementation of software use.

When an organization implements new software, the licenses are generally acquired up-front, but the implementation may last for 3-9 months and sometimes longer. In this situation, the Warranty may expire prior to license utilization, and maintenance may be required for licenses yet to be implemented. Knowing your implementation schedule will enable you to present this data to the seller and will provide a logical negotiation position to ensure that your warranty covers you until your initial implementation proves that the software is working as expected. If the Warranty cannot be extended, obtaining maintenance at no additional cost until the licenses are implemented may be granted. In either case, scheduling maintenance “turn-on” to match the implementation schedule will save cost through implementation. While the Software Publisher/Reseller will argue that maintenance applies the day you acquire software, your implementation schedule can serve as data to counter this argument. Refer to the Software Warranty White Paper for more information.

<http://www.esi.mil/LandingZone.aspx?id=273&zid=3>

IV. Strategize and Negotiate Phases



Software maintenance negotiations are most likely to occur in one of the following timing scenarios:

- a. when a current maintenance period under contract is set to expire, or
- b. when an organization is anticipating a new, large license acquisition from the publisher currently providing software maintenance, or
- c. when an organization attempts to reduce software maintenance costs without the leverage of an expiring contract or a pending large new license acquisition.

Under the first scenario, the buyer will face extremely challenging negotiations, as Software Publishers seek to retain and grow their maintenance revenue, especially in a slow economy or when their product set has matured and is no longer in rapid growth mode.

In the second scenario, negotiations will still be very challenging, but the advantage is that the buying organization has a pending large license purchase that can be used to incentivize the Publisher to offer better renewal maintenance pricing on existing licenses as part of concessions to close the existing sale.

A third scenario, where a buyer initiates negotiations in the middle of a contract period solely for cost reduction purposes, would be difficult to accomplish as the Publisher has no incentive to reduce its price, unless regulatory or legal issues are present.

Two of the most common scenarios are discussed in greater detail below.

1. Stand-alone Negotiating Software Maintenance Cost Reductions

Armed with the data from the analyses discussed above, the acquisition team, led by the Contracting Officer, must present a logical position on what the fair price for software maintenance should be.

Detailed requirements, price point comparisons, Industry findings, and alternate approaches, including potential competitive actions (if any), should be discussed.

Any instances found where existing software maintenance costs exceed prices paid on other contracts should be identified, further highlighting the potential need for discussions on pricing with the software publisher.

2. Negotiating Software Maintenance Cost Reductions in Conjunction with a Large Incremental Acquisition

When pursuing a large sale of additional software into an organization that has a large installed base of software currently under maintenance, the Publisher is amenable (and often insists upon) rolling the existing software maintenance into the new contract.

Similar to the Stand-alone scenario, when negotiating a large incremental purchase from the Software Publisher, the acquisition team, led by the Contracting Officer, must present a logical position on what the fair price for software maintenance should be.

As described above, if the team has identified detailed requirements, documented price point comparisons, Industry findings, and alternate approaches, including potential competitive actions, it should be well prepared for negotiations.

Using the potential new acquisition as incentive, the negotiation team should ask for terms, conditions, and prices that are required yet are not included in the existing contract. The team needs to maximize this buying opportunity, including receiving more favorable treatment on software maintenance prices.

Additional discounts should be sought, including maintenance discounts based on the license discount offered, receiving a price that reflects a lower maintenance percentage of net license fees (for use only as an example: a maintenance percentage of 15% instead of 22%), and long term flat line or slight escalation on future maintenance prices.

V. Conclusion

Government organizations need to look at the way the private sector treats software maintenance. Recognizing that Government organizations must follow Component or Agency policies, and that software maintenance requirements must consider Federal Cyber Security mandates through policy and assessments, there remain approaches that can be borrowed from Commercial Best Practices to reduce software maintenance costs.

Software maintenance may not always be required, and when it is, the maintenance acquired should match the specific requirements of the users. Permanently unused licenses should not be maintained, and maintenance generally should not be bought for all licenses at the highest level of support.

When an appropriate opportunity presents itself (renewal of contract maintenance or when there is a pending large acquisition of additional licenses), the acquiring team should determine requirements, perform a series of analytical and financial analyses, and develop a target “fair” cost of maintenance. Armed with the data supporting the “fair” cost, negotiations should focus on achieving this fair cost while keeping open other options to the existing software maintenance approach.

About the Author

John Zettler is part of the DoD ESI Contractor Support Team and a principal at BuySide Partners. He has over 30 years of experience in Government Acquisition, specializing in financial, pricing and related contractual functions. Mr. Zettler's focus is on Best Value acquisition, employing Total Cost of Ownership (TCO) and Life-Cycle Cost Estimate (LCCE) methodologies. He has 20 years of experience in financial issues surrounding Commercial Off-the-Shelf (COTS) Enterprise Software Licensing and Pricing.



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