Working Draft:

Software Revenue Recognition Implementation Issue

Issue 14-4 (b): Estimating the Standalone Selling Price of Options That are Determined to be Performance Obligations

Expected Overall Level of Impact to Industry Accounting: Moderate

Wording to be Included in the Revenue Recognition Guide:

1. The guidance in FASB ASC 606-10-55-44 and 55-45 provides two potential ways to account for an option within an arrangement that provides a customer with a material right. The first method, as described in FASB ASC 606-10-55-44, involves including the option itself as the identified deliverable, and basing the relative selling price allocation on the determined value of the option.

2. The second method, described in FASB ASC 606-10-55-45, allows an entity to use a practical alternative of "looking through" the option and including the future goods or services to which the option relates in the relative selling price allocation, if certain criteria are met. Under this approach, a hypothetical estimated transaction price of the potential future performance obligations (including the goods and services covered by the option) is calculated, taking into consideration both the value of the promised good or service and the likelihood that the option is exercised. Note that this hypothetical estimated transaction price is used solely for the purpose of allocating the arrangement consideration.

3. The calculations under these two methods can be complex, as illustrated by the following example:

   Example 1 - Discounted Maintenance Renewal Options:

4. An entity enters into 100 separate contracts with customers to provide a perpetual license for $10,000 and one year of maintenance services for $1,800, for a total combined value of $11,800 per contract. The terms of the contracts specify that at the end of each subsequent year, the customer has the option to renew the maintenance contract for an additional year by paying an additional $1,200 as long as the customer's maintenance coverage has not lapsed. This option expires after five annual maintenance renewals. For purposes of this example, assume both the license and the maintenance are determined to be distinct

performance obligations. The determination of whether maintenance consists of one or more distinct performance obligations is outside of the scope of this example. The entity determines that the stated contractual amounts of $10,000 for the license and $1,800 for the maintenance services are representative of the standalone selling prices for each of these performance obligations.

5. The entity concludes that the renewal option provides a material right to the customer that it would not receive without entering into the contract because the standard price for annual maintenance is $1,800 per year. As a result, the option is determined to be a distinct performance obligation in the arrangement.

6. The renewal option is for a continuation of maintenance services, and those services are provided in accordance with the terms of the existing contract. Given its history of renewals, the entity expects 95 customers to renew at the end of Year 1 (95 percent of contracts sold), 88 customers to renew at the end of Year 2 (93 percent of the 95 customers that renewed at the end of Year 1), 81 customers to renew at the end of Year 3 (92 percent of the 88 customers that renewed at the end of Year 2), 73 customers to renew at the end of Year 4 (90 percent of the 81 customers that renewed at the end of Year 3) and 64 customers to renew at the end of Year 5 (87 percent of the 73 customers that renewed at the end of Year 4).

Alternative A – estimating the standalone selling price of the option

7. The entity estimates the standalone selling price of the customer's maintenance renewal option in accordance with FASB ASC 606-10-55-44, rather than using the "look-through" method of accounting for the potential future goods and services (as described in FASB ASC 606-10-55-45 and Alternative B below). Under this method, the entity directly estimates the standalone selling price of the option.

8. Each renewal option represents a $600 nominal discount from the standard $1,800 annual maintenance fee. The entity estimates the value of each annual renewal option through the expected customer life by multiplying the likelihood of each renewal (as shown above) by this nominal discount value of $600, as follows:

Year 1 renewal = $	570	($600 multiplied by 95%)
Year 2 renewal = $	528	($600 multiplied by 88%)
Year 3 renewal = $	486	($600 multiplied by 81%)
Year 4 renewal = $	438	($600 multiplied by 73%)
Year 5 renewal = $	384	($600 multiplied by 64%)

9. The combined value of these renewal options is $2,406. The entity allocates the total contractual amount of $11,800 to the identified performance obligations using the relative standalone selling price basis as follows:

Performance Obligation	Stand-alone selling price	Relative Allocation %	Allocation of contract consideration
Perpetual License	$10,000	70.4%	$8,307
Maintenance	1,800	12.7%	1,499
Renewal option – year 2	570	4.0%	472
Renewal option – year 3	528	3.7%	439
Renewal option – year 4	486	3.3%	389
Renewal option – year 5	438	3.1%	366
Renewal option – year 6	384	2.8%	328
Total	$14,206	100.0%	$11,800

10. In year 1, the entity recognizes $9,806 [$8,307 + 1,499] and defers the amount allocated to the renewal option of $1,994 [472 + 439 + 389 + 366 + 328].

11. Assuming no changes to the initial assumptions, as the customer exercises the renewal option in each of the following years, the entity recognizes revenue as follows:

	a	b	a + b	
	Price of renewal per contract	Consideration allocated to the option (paragraph 9)	Revenue	Remaining deferred revenue*
Year 2	$ 1200	472	1,672	1,522
Year 3	1200	439	1,639	1,083
Year 4	1200	389	1,589	694
Year 5	1200	366	1,566	328
Year 6	1200	328	1,528	0

* The amount relieved from deferred revenue under Alternative A would be the difference between the total amount deferred for the renewal option (in paragraph 10) less the allocated consideration for each renewal period. For example, in year 2, the entity has deferred revenue of $1,522 [$1.994 – 472]; in year 3, $1,083 [1,522 – 439]; in year 4, $694 [$1,803 – 389]; in year 5, $328 [$694 – 366].

12. Under Alternative A, if the customer elects to stop exercising its option for renewals of maintenance services, the entity would update its revenue recognition for that change in estimate. In most scenarios, this would result in the entity recognizing any remaining deferred revenue in the period that the customer no longer renews. For example, if the customer elected to cease purchasing the maintenance services at the end of year three, the entity would recognize as revenue the remaining balances of deferred revenue ($1,083).

13. The intent of this example is to show one way of valuing the option. It is not meant to indicate that this is the only way to estimate the standalone selling price of the option. This example also includes simplified assumptions concerning the certainty around the future value of the maintenance services and renewal rates. For example, the illustration above presumes the entity has estimated the same stand-alone selling price of maintenance for each year of in the contract. This is not meant to imply that an entity would have to reach this conclusion. Therefore, differing valuation methodologies may be warranted in more complex situations.

14. Further, the entity would have to determine the most appropriate pattern of revenue recognition for arrangement consideration allocated to the option. For example, the entity would have to determine if the renewal options together represent a single performance obligation or if each renewal option (e.g., the ability to renew in year two, the ability to renew in year three, etc…) is a distinct performance obligation. This evaluation likely would affect the pattern of revenue recognition for the consideration allocated to the renewal options.

Alternative B – Using the Practical Alternative

15. Under the practical alternative provided in FASB ASC 606-10-55-45, the entity allocates the transaction price by reference to the goods or services it expects to provide in exchange for the consideration it expects to receive (rather than valuing the option itself as described in FASB ASC 606-10-55-44 and as shown in Alternative A).

16. Assuming the same facts as above in paragraphs 4-6, the entity concludes it meets the criteria in FASB ASC 606-10-55-45 and elects to use the practical alternative to estimate the standalone selling price of the optional goods or services (rather than value the option itself).

17. For purposes of this example, assume the entity concludes that each annual period of maintenance renewal represents one performance obligation. Therefore, the entity must estimate the stand-alone selling price for each deliverable – the license, the initial maintenance period and the renewal periods. Additionally, the entity must estimate the hypothetical estimated transaction price.

18. One approach to this estimation would be to include in the hypothetical transaction price the contractual price for each expected period of maintenance services to be provided. Said another way, if the entity believes the customer will elect to receive the maintenance services for all five optional years in the contract, the entity should also include the arrangement consideration of $6,000 for those services. (However, an entity could also elect to take a portfolio approach to calculating the hypothetical estimated transaction price, see paragraph 27.)

19. For example, the following relative selling price allocation assumes the entity's best estimate is that a customer will ultimately purchase all of the years of maintenance services available under the renewal option. Under this assumption, the entity estimates a hypothetical transaction price of $17,800 [$11,800 + (5 renewals x $1,200)]. (For simplicity's sake, this example does not contemplate any price concessions or other similar forms of variable consideration.)

Performance obligation	Stand-alone selling price	Relative Allocation %	Allocated consideration
Perpetual license	10,000	48.1%	8,558
Maintenance – year 1	1,800	8.7%	1,540
Maintenance – year 2	1,800	8.7%	1,540
Maintenance – year 3	1,800	8.7%	1,540
Maintenance – year 4	1,800	8.7%	1,540
Maintenance – year 5	1,800	8.7%	1,541
Maintenance – year 6	1,800	8.7%	1,541
	20,800	100.0%	17,800

20. In year 1, the entity recognizes $10,098 [$8,558 + 1,540] and defers the amount allocated to the renewal option of $1,702 [$11,800 – 10,098].

21. Assuming no changes to the initial assumptions, as the customer exercises it renewal option in each of the following years, the entity recognizes revenue as follows:

	Revenue (paragraph 19)	Remaining deferred revenue**
Year 2	1,540	1,362
Year 3	1,540	1,022
Year 4	1,540	682
Year 5	1,541	341
Year 6	1,541	0

** The amount relieved from deferred revenue under this alternative would be the difference between the allocated considerations for each renewal period (paragraph 19) less the price of the renewal option per the contract of $1,200. For example, in year 2, the entity has deferred revenue of $1,362 [$1,702 – (1,540 – 1,200)]; in year 3, $1,022 [$1,362 - (1,540 – 1,200)]; in year 4, $682 [$1,022 – (1,540 – 1,200)]; in year 5, $341 [$682 – (1,541 – 1,200)].

22. Under this alternative, if the entity changes its original estimate of how many years of maintenance services the customer will purchase (e.g., the customer elects to stop exercising its option for renewals of maintenance services after year three or, based on current customer behavior, the entity now believes the customer will only purchase maintenance services through year 5), the entity would update its revenue recognition for that change in estimate. In scenarios where this change in estimate is related to the customer ceasing to make purchases, this generally would result in the entity recognizing any remaining deferred revenue in the period that the customer no longer renews. For example, if the customer elected to cease purchasing the maintenance services at the end of year three, the entity would recognize as revenue the remaining balances of deferred revenue ($1,022).

23. Alternatively, if the entity's best estimate was that the customer would only exercise the renewal option for three years, the entity estimates a hypothetical transaction price of $15,400 [$11,800 + (3 renewals x $1,200)]. The relative selling price allocation would be as follows: (For simplicity's sake, this example does not contemplate any price concessions or other similar forms of variable consideration.)

Performance obligation	Stand-alone selling price	Relative Allocation %	Allocated consideration
Perpetual license	10,000	58.0%	8,932
Maintenance – year 1	1,800	10.5%	1,617
Maintenance – year 2	1,800	10.5%	1,617
Maintenance – year 3	1,800	10.5%	1,617
Maintenance – year 4	1,800	10.5%	1,617
	17,200	100.0%	15,400

24. In year 1, the entity recognizes $10,549 [$8,932 + 1,617] and defers the amount allocated to the renewal option of $1,251 [$11,800 – 10,549].

25. Assuming no changes to the initial assumptions, as the customer exercises it renewal option in each of the following years, the entity recognizes revenue as follows:

	Revenue (paragraph 23)	Remaining deferred revenue***
Year 2	1,617	834
Year 3	1,617	417
Year 4	1,617	0

*** The amount relieved from deferred revenue under this alternative would be the difference between the allocated considerations for each renewal period (paragraph 23) less the price of the renewal option per the contract of $1,200. For example, in year 2, the entity has deferred revenue of $834 [$1,251 – (1,617 – 1,200)]; in year 3, $417 [$834 - (1,617 – 1,200)]

26. Similar to the prior alternative, and as discussed in paragraph 22 above, under this alternative, the entity would have to monitor this estimate going forward and update its revenue recognition for any changes in estimates.

27. As mentioned in paragraph 18, under Alternative B an entity could also use a portfolio approach for purposes of estimating the hypothetical transaction price. Under this approach, at contract inception, the entity determines the hypothetical transaction price taking into consideration the entity's best estimate of renewal rates for its portfolio of contracts. Using the same renewal rates as those used in Alternative A (paragraph 8), under this approach the entity estimates the hypothetical transaction price of $16,612 [$11,800 + (95 percent x $1,200) + (88 percent x $1,200) + (81 percent x $1,200) + (73 percent x $1,200) + (64 percent x $1,200)]. The entity then allocates that amount out to each of the identified deliverables based on the following relative selling price allocation:

Performance obligation	Stand-alone selling price	Relative Allocation %	Allocated consideration
Perpetual license	10,000	48.1%	7,987
Maintenance – year 1	1,800	8.7%	1,438
Maintenance – year 2	1,800	8.7%	1,438
Maintenance – year 3	1,800	8.7%	1,438
Maintenance – year 4	1,800	8.7%	1,438
Maintenance – year 5	1,800	8.7%	1,438
Maintenance – year 6	1,800	8.7%	1,438
	20,800	100.0%	16,612

28. In year 1, the entity recognizes $9,425 [$7,987 + 1,438] and defers the amount allocated to the renewal option of $2,375 [$11,800 – 9,425].

29. Revenue recognized each year would be as follows:

	Revenue (paragraph 27)	Remaining deferred revenue****
Year 2	1,438	2,077
Year 3	1,438	1,695
Year 4	1,438	1,229
Year 5	1,438	667
Year 6	1,438	0

****The amount relieved from deferred revenue under the portfolio approach would be the difference between the average amount of cash received in each renewal year and the revenue recognized that year. For example, in year two the calculation would be ($1,200 per contract renewal * 95% renewal rate) = $1,140 average cash received compared to the revenue of $1,438 for year, therefore amount relieved in year two would be $298

30. However, when using a portfolio approach, the amount of deferred revenue each period depends on the Company's experiences with its overall portfolio and the actual customer renewals compared to its original estimates, including any adjustments to estimated variable consideration that were necessary. Under this alternative, a customer cancellation of the arrangement likely would not result in an immediate recognition of some amount of deferred revenue as the portfolio estimations would have built into the overall estimates some percentage of cancellations each year. Only if the actual cancellation pattern for the portfolio as a whole differed from the entity's original estimates would the entity determine that a change in estimate would be necessary, likely resulting in an adjustment to deferred revenue balance.

31. Note, the illustrations above presume the entity has estimated the same stand-alone selling price of maintenance for each year in the contract. This is not meant to imply that an entity would have to reach this conclusion. For example, an entity may have a practice of increasing the stand-alone selling price of the annual maintenance each year. Entities should estimate the stand-alone selling price for maintenance using the guidance in FASB ASC 606-10-32-34.

Comments should be received by December 5, 2016, and sent by electronic mail to Kim Kushmerick at kkushmerick@aicpa.org, or you can send them by mail to Kim Kushmerick, Accounting Standards, AICPA, 1211 Avenue of the Americas, NY 10036.