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How the new revenue standard affects engineering and construction entities

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What you need to know

- Engineering and construction (E&C) entities have had to make a number of new judgments and apply certain new concepts when they adopted the new revenue recognition standard. In some cases, they reached different conclusions about the units of accounting or the amount and timing of variable consideration to include in the transaction price.
- Applying the new standard required changes to an entity's accounting policies, processes and internal controls, and sometimes required changes to its information technology systems.
- Entities that adopted the new standard found that implementation required significantly more effort than they expected, even when the accounting effects were not significant.

Overview

The new revenue recognition standard[1] issued by the Financial Accounting Standards Board (FASB or Board) requires entities in the E&C industry to make additional judgments and estimates, such as identifying performance obligations, accounting for contract modifications, applying the constraint on variable consideration, measuring progress toward satisfaction of a performance obligation, recognizing contract costs and addressing disclosure requirements.

This publication highlights key aspects of applying the FASB's standard to an E&C entity's contracts with its customers, addresses significant changes to legacy practice and reflects the latest implementation insights.

Building a better working world

As a reminder, the FASB deferred[2] the effective date to annual periods beginning after 15 December 2019 and interim periods in annual periods beginning after 15 December 2020, for entities that had not yet issued (or made available for issuance) financial statements that reflected the standard as of 3 June 2020 (i.e., certain private and not-for-profit entities). Early adoption is permitted. The deferral is intended to give these entities more time to implement the standard, given the operational and financial reporting challenges of the COVID-19 pandemic. Public entities, as defined by the standard, and some private and not-for-profit entities were already required to adopt the standard.

This publication, which contains a summary of the standard in the appendix, supplements our Financial reporting developments (FRD) publication, ***Revenue from contracts with customers (ASC 606)***, and should be read in conjunction with it. We refer to that publication as our revenue FRD. The views we express in this publication may continue to evolve as implementation continues and additional issues are identified.

E&C entities should also keep in mind that, when they adopt the new credit impairment standard,[3] they will need to estimate full lifetime expected credit losses for their accounts receivable and contract assets. As a reminder, they will need to do this after assessing collectibility under the revenue guidance to determine whether they have a contract with a customer. Refer to our FRD publication, ***Credit impairment for short-term receivables under ASC 326***, for more information.

Determining the performance obligations in an E&C contract requires judgment.

Identifying performance obligations in E&C contracts

Identifying promised goods or services

E&C entities need to evaluate their contract terms and customary business practices to identify all promised goods or services within their contracts and determine which of those promised goods or services (or bundled goods and services) should be accounted for as separate performance obligations (i.e., the unit of accounting for purposes of applying the standard). Properly identifying performance obligations is a critical step in the revenue model because revenue allocated to each performance obligation is recognized as the obligation is satisfied.

The standard lists several common E&C activities as promised goods or services, including the construction, manufacture or development of an asset on behalf of a customer and the performance of a contractually agreed-upon task for a customer (e.g., design and engineering services). Promised goods or services represent separate performance obligations if they are either (1) distinct (by themselves or as part of a bundle of goods and services) or (2) part of a series of distinct goods and services that are substantially the same and have the same pattern of transfer to the customer (see section 4.2.2 in our revenue FRD for a further discussion of (2)).

Determination of distinct

A promised good or service is distinct if it is both (1) capable of being distinct and (2) distinct in the context of the contract. A good or service is capable of being distinct if a customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer. In many cases, goods or services are capable of being distinct but may not be distinct in the context of the contract because the entity's promise is to transfer a combined item that includes the promised goods or services as inputs. The standard provides factors (see Step 2 in the appendix) that help entities make this determination.

The Board observed in the Background Information and Basis for Conclusions of Accounting Standards Update (ASU) 2014-09[4] that a good or service is not separable (i.e., distinct in the context of the contract) from other promises in the contract when an entity provides a significant integration service to incorporate individual goods and/or services into a combined

output. When evaluating this factor, entities should consider whether they are providing a significant integration service that effectively *transforms* the individual promised goods and services (the inputs) into a combined output.

The Board further observed[5] that this factor may be relevant in many construction contracts if a contractor provides an integration (or contract management) service to manage and coordinate the various construction tasks and assumes the risks associated with the integration of those tasks. The FASB noted,[6] "The integration service will require a contractor to coordinate the tasks performed by any subcontractors and ensure that those tasks are performed in accordance with the contract specifications, thus ensuring the individual goods or services are appropriately incorporated into the combined item for which the customer has contracted."

When a contractor promises to build a single structure for the customer, a contractor may combine a number of goods and services into a single deliverable (e.g., integrates various building materials, labor and project management services into a single structure) and in those cases would be providing one combined output to the customer.

However, in other situations, E&C entities may determine that the goods and services included in the contract are not integrated when the contract includes various promised goods or services that contribute to the completion of more than one promised good or service.

Examples of services provided by a contractor that may not be integrated include:

- Construction of a manufacturing facility and a storage facility on a separate property (i.e., they are not inputs into a combined output)
- Extended warranties that are service-type warranties
- General maintenance services after completing the construction of a railway project

E&C entities also may determine that a good or service promised in a contract is not distinct in the context of the contract because it significantly modifies or customizes (or is significantly modified or customized by) one or more of the other goods or services promised in the contract.

Illustration 1 — Significant integration service

Contractor Q, a specialty construction firm, enters into a contract with a municipality to design and construct a tunnel. The project has two phases, design and construction, and the contract provides separate compensation for each phase.

Analysis

For purposes of this example, assume that the individual goods and services provided in each phase are capable of being distinct. Contractor Q must then determine whether each of the individual goods and services in each phase is distinct in the context of the contract. Contractor Q provides a significant service of (1) integrating the various design services to produce project plans in the design phase and (2) integrating the various materials and construction services to build the tunnel in the construction phase. Contractor Q then evaluates whether the aggregated goods and services in the design phase (i.e., project plans) and aggregated goods and services in the construction phase (i.e., tunnel) are distinct in the context of the contract and, therefore, are two performance obligations or whether together they represent a single performance obligation.

In this illustration, the design and construction of a tunnel is necessary to satisfy Contractor Q's contract with the municipality. Given the complex nature of the project, assume Contractor Q will be required to frequently alter the design of the tunnel during construction and to continually assess the propriety of the materials to be used. These changes may cause Contractor Q to rework the construction of the tunnel. Contractor Q determines it is providing a significant service of integrating goods and services into the combined output for which the municipality has contracted (i.e., a completed tunnel). Contractor Q concludes that the design services and construction services are not distinct in the context of the contract and instead should be combined and accounted for as one performance obligation.

How we see it

E&C entities have found that when they apply the revenue standard, they sometimes have reached different conclusions about the units of accounting from those when they applied the legacy guidance on contract segmentation in Accounting Standards Codification (ASC) 605-35, *Revenue Recognition — Construction-Type and Production-Type Contracts*. For example, a contractor that considered an entire contract a profit center (i.e., a single unit of accounting) under the legacy guidance may determine that the contract contains two or more performance obligations that will be accounted for separately under the revenue standard.

E&C entities have found that when they apply the revenue standard, they sometimes have reached different conclusions about the units of accounting from those they applied under the legacy guidance.

Contract duration

An entity first determines the duration of the contract to apply certain aspects of the revenue model (e.g., identifying performance obligations, determining the transaction price). The contract duration under ASC 606 is the period in which parties to the contract have present enforceable rights and obligations, and it may be affected by termination provisions in the contract. An entity cannot assume that there are presently enforceable rights and obligations for the entire term stated in the contract and will likely have to consider enforceable rights and obligations in individual contracts. Significant judgment is required to determine the effect of termination provisions on the contract duration. Entities should review the overall contractual arrangements, including any master service arrangements, wind-down provisions and business practices to identify terms or conditions that might affect the enforceable rights and obligations in their contracts.

The Joint Transition Resource Group for Revenue Recognition (TRG) members generally agreed[7] that enforceable rights and obligations exist throughout the term in which each party has the unilateral enforceable right to terminate the contract by compensating the other party. For example, if a contract includes a substantive termination payment, the duration of the contract should equal the period through which a termination penalty would be due. This could be the stated contractual term or a shorter duration if the termination penalty did not extend to the end of the contract.

However, TRG members observed that the determination of whether a termination penalty is substantive and what the enforceable rights and obligations are under a contract will require judgment and consideration of the facts and circumstances. The TRG agenda paper also noted that if an entity concludes that the contractual term is less than the stated term because of a termination clause, any termination penalty should be included in the transaction price. If the termination penalty is variable, the guidance on variable consideration, including the constraint (see section 5.2.3 in our revenue FRD), would be applied.

Conversely, TRG members also agreed that if a contract with a stated contractual term can be terminated by either party for no consideration at any time, the contract duration ends when control of the goods or services already provided transfers to the customer (e.g., a month-to-month service contract), regardless of the contract's stated contractual term. In these cases, entities also need to consider whether a contract includes a notification or cancellation period (e.g., the contract can be terminated with 90 days' notice) that would cause the contract duration to extend beyond the date when control of the goods or services already provided transferred to the customer. If such a period exists, the contract duration would be shorter than the stated contractual term but would extend beyond the date when control of the goods or services already provided transferred to the customer.

E&C contracts may contain provisions that allow a customer to terminate a project for convenience but do not provide similar rights to the contractor. These termination clauses may exist to allow a customer flexibility in the event there are unforeseen circumstances (e.g., economic circumstances, political circumstances) that affect the customer or a project.

A termination-for-convenience clause may require the customer to pay a termination penalty to the E&C entity. If the E&C entity determines that this termination penalty is substantive, the duration of the contract is the entire term stated in the contract because enforceable rights and obligations exist through the period covered by the termination penalty. If the E&C entity concludes that the termination penalty is not substantive, enforceable rights and obligations do not exist through the entire term stated in the contract.

If enforceable rights and obligations do not exist throughout the entire term stated in the contract (e.g., when there are no substantive penalties), TRG members generally agreed[8] that customer cancellation rights would be treated as customer options. An E&C entity would then need to determine whether the cancellation option indicates that the customer has a material right that would need to be accounted for as a performance obligation (e.g., there is a discount for goods or services provided during the cancelable period that provides the customer with a material right).

Illustration 2 — Construction contract with termination provisions

A customer enters into a contract with an engineering and construction company for the design and construction of a specialized manufacturing facility. The contract contains a unilateral right for the customer to cancel the contract for convenience. If the customer decides to cancel the contract, it would incur a substantive penalty in the form of a substantial payment to the contractor.

Analysis

The contractor assesses the contract at inception and determines that the substantial payment associated with terminating the project is a substantive termination penalty. Therefore, the contract price and duration of the contract are determined based on the defined scope in the contract (i.e., the entire project, which includes the period required to design and build a specialized manufacturing facility).

How we see it

Determining whether triggering a termination clause creates a substantive penalty requires judgment. E&C entities need to carefully evaluate contract terms and penalties that would arise as a result of the customer terminating the contract.

Contract modifications

Parties to E&C contracts frequently agree to change orders that modify the scope and/or price of a contract. Contractors also regularly submit claims to customers as provided for in the contract with the customer when they incur unanticipated costs as a result of delays, errors or changes in scope caused by the customer. Under the standard, change orders and claims are generally accounted for as contract modifications.

An entity generally does not apply the standard to a contract modification until there are new or changed enforceable rights and obligations. For change orders, this generally occurs when the change order is approved. Approval of a modification may be written, oral or implied by the entity's customary business practices. An entity may have to account for a contract modification before the parties reach final agreement on changes in scope or pricing (or both). Instead of focusing on the finalization of a modified agreement, the standard focuses on the enforceability of the changes to the rights and obligations in the contract. Once the entity determines that the revised rights and obligations are legally enforceable, the entity should account for the contract modification.

If the parties to a contract have approved a change in the scope of the contract but have not yet determined the change in price, an entity has to estimate the change to the transaction price arising from the modification in accordance with the guidance for estimating variable consideration. For further discussion, refer to the *Estimating the effects of unpriced change orders and claims* section under *Variable consideration* below.

E&C entities must estimate changes to the transaction price arising from modifications when a change in scope has been approved.

The following illustration, which is based on Example 9[9] in the standard, illustrates the assessment of whether to apply the contract modification guidance.

Illustration 3 — Construction contract claim

A contractor enters into a contract with a customer to construct a power plant on customer-owned land. The contract requires the customer to give the contractor access to the land within 45 days of contract inception. However, the contractor is not granted access until 150 days after contract inception because the customer is unable to complete the removal of existing structures on the land. The contract states that a delay in the contractor accessing the customer-owned land is an event that entitles the contractor to compensation for costs incurred as a direct result of the delay. The contractor is able to demonstrate that it has incurred specific direct costs as a result of the delay in accordance with the terms of the contract and prepares a claim. The customer initially disagrees with the entity's claim.

Analysis

The contractor assesses the legal basis of its claim and determines on the basis of the underlying contractual terms that it has enforceable rights. As a result, the contractor accounts for the claim as a contract modification.

Once an entity has determined that a contract has been modified (e.g., because of a change order or claim), the entity has to determine the appropriate accounting for the contract modification. Certain modifications are treated as separate, standalone contracts, while others are combined with the original contract and accounted for in that manner. In addition, some modifications are accounted for on a prospective basis and others on a cumulative catch-up basis.

The accounting depends on whether the modification results in the addition of distinct goods or services and whether the amount of consideration expected for those goods or services reflects their standalone selling price. Refer to section 3.4.1 of our revenue FRD for a discussion of determining whether a contract modification represents a separate contract. Further, section 3.4.2 of our revenue FRD describes how a contract modification is accounted for when it is not a separate contract.

The following illustrates an entity's analysis of the accounting for a contract modification:

Illustration 4 — Modification of a construction contract

Entity E agrees to construct a manufacturing facility on a customer's land for $10 million. During construction, the customer determines that a separate storage facility is needed at the location. The parties agree to modify the contract to include the construction of the storage facility, which is to be completed within three months of completion of the manufacturing facility, for a total price of $11 million (i.e., when the contract is modified, an additional $1 million is added to the consideration Entity E will receive). Assume that Entity E determines that the construction of the separate storage facility is distinct (i.e., a performance obligation) and that it transfers control of each facility over time. Entity E must determine whether the $1 million represents the standalone selling price of the separate storage facility.

Scenario A

Entity E determines that $1.1 million is the standalone selling price at the contract modification date for the construction of a similar facility. However, much of the equipment and labor force necessary to complete construction of the storage facility is already on-site and available for use by Entity E. Thus, Entity E concludes that the additional $1 million reflects the standalone selling price at contract modification, adjusted for the circumstances of the contract.

As a result, the contract modification for the additional storage facility is accounted for as a separate contract that does not affect the accounting for the existing contract.

Scenario B

Entity E determines that $1.5 million is the standalone selling price at the contract modification date for the construction of a similar facility. While Entity E can attribute some of the discount to its ability to use equipment and labor that are already on-site, the price reduction was primarily driven by other factors (e.g., a desire to maintain the customer relationship). Therefore, the additional $1 million does not reflect the standalone selling price at contract modification.

Because the additional consideration does not reflect the standalone selling price at contract modification, and the remaining goods and services include some that are distinct from those already provided (i.e., the storage facility construction is distinct from the goods and services in the existing contract) and some that are not distinct from those already provided (i.e., the remaining goods and services related to constructing the manufacturing facility), Entity E accounts for the modification by allocating the updated transaction price of $11 million to the two remaining performance obligations, based on their relative standalone selling prices. Any revenue previously recognized for constructing the manufacturing facility is adjusted on a cumulative catch-up basis to reflect the allocated transaction price and an updated measure of progress. Revenue from the construction of the storage facility (i.e., a separate performance obligation) is recognized based on the appropriate measure of progress.

Example 8 in the standard[10] illustrates a contract modification that is accounted for as part of the existing contract because the remaining goods or services are not distinct and, therefore, form part of a single performance obligation that is partially satisfied at the date of the contract modification. This example can also be found in section 3.4.2 of our revenue FRD.

When determining how to account for a contract modification, an E&C entity must consider whether any additional goods or services are distinct, which includes an assessment of whether those goods or services are distinct within the context of the contract. That is, although a change order may add a new good or service that is capable of being distinct, that new good or service may not be distinct when considered in the context of the contract.

For example, in a building construction project, a customer may request a change order to add an additional floor. The construction firm may commonly perform services to construct additional space (e.g., a new floor or wing) for an existing, completed building on a standalone basis, which would indicate that the service is capable of being distinct. However, when that service is added to an existing contract (e.g., a contract to construct the entire building) and the entity has already determined that the entire project is a single performance obligation, the added goods and services are combined with the existing bundle of goods and services.

How we see it

E&C entities need to carefully evaluate performance obligations at the date of a modification to determine whether the remaining goods or services to be transferred are distinct and priced at their standalone selling prices. This assessment is important because the accounting can vary significantly depending on the conclusions reached.

Variable consideration

E&C contracts often contain provisions that result in the contractor receiving variable consideration. The standard requires entities to estimate the variable consideration they expect to receive and include those amounts in the transaction price unless the amounts are constrained.

Contract incentives and penalties

The transaction price in an E&C contract may vary in amount as a result of incentives, bonuses, credits or penalties included in a construction contract. For example, a contractor may receive a performance bonus for meeting certain project completion dates or incur a penalty for late delivery (e.g., liquidated damages).

An E&C entity is required to estimate each type of variable consideration using either the "expected value" method (i.e., the sum of probability-weighted amounts) or the "most likely amount" method (i.e., the single most likely outcome), based on which method better predicts the amount of consideration to which it will be entitled. The Board indicated that the most likely amount approach may be the better predictor when the entity expects to be entitled to one of only two possible amounts (e.g., a contract in which an entity is entitled to receive all or none of a specified performance bonus, but not a portion of that bonus).

The standard requires an entity to apply one method consistently throughout the contract when estimating the amount of variable consideration to which it expects to be entitled. The selected method should be applied consistently to contracts with similar characteristics and in similar circumstances. However, when a single contract has multiple types of variable consideration (e.g., a contract with varying incentives or penalties), the entity may use different methods for estimating different types of variable consideration if the entity expects that each method better predicts the amount of consideration to which it will be entitled in each case.

Example 21 in the standard[11] illustrates how an entity may estimate variable consideration. Refer to the section *Constraining estimates of variable consideration* below for further discussion of applying the constraint to estimates of variable consideration.

Estimating the effects of unpriced change orders and claims

As discussed above, unpriced change orders that modify the scope or price (or both) of a contract and claims that contractors submit to customers when they incur unanticipated costs as a result of delays, errors or changes in scope caused by the customer are generally accounted for as contract modifications. Unpriced change orders and claims that are not accounted for as separate contracts also affect the transaction price.

If the parties to a contract have approved a change in the scope of the contract but have not yet determined the corresponding change in price, an entity estimates the change to the transaction price arising from the modification in accordance with the guidance for estimating variable consideration (i.e., after considering the variable consideration constraint). Significant judgment is required when estimating the amount of variable consideration related to an unpriced change order or claim that should be included in the transaction price. E&C entities need to consider their experience with successfully negotiating similar change orders or claims (including the entity's history with the customer, contract type, and nature of change order or claim), as well as the likelihood of collecting the associated amounts.

Constraining estimates of variable consideration

An E&C entity includes variable consideration in the transaction price if it has concluded that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. The standard provides factors that increase the likelihood or the magnitude of a revenue reversal. Refer to Step 3 in the appendix for a discussion of some of these factors.

E&C entities have had to change their processes for estimating variable consideration.

E&C entities need to consider their experience with similar contracts, uncertainties that may exist in the latter periods of a long-term contract, and market and other factors that may be outside of their control (e.g., weather). E&C entities may also find this evaluation to be especially difficult when determining whether variable consideration from unpriced change orders and claims should be included in the transaction price because of uncertainty about the outcomes and the length of time until they are resolved. E&C entities need to determine how the existence of such factors affects their assessment of the constraint, which may be different for each individual unpriced change order or claim since the risks associated with them could vary. In addition, conclusions about amounts that may result in a significant revenue reversal may change as an E&C entity satisfies a performance obligation. E&C entities should sufficiently and contemporaneously document the reasons for their conclusions, including their analysis and conclusions about both corroborating and contrary evidence.

Further, the Board noted[12] that entities should evaluate the magnitude of a potential reversal relative to the total cumulative revenue recognized (i.e., fixed and variable) at the date of the potential reversal. TRG members generally agreed[13] that the constraint should be applied at the contract level (i.e., an entity should consider whether a potential revenue reversal is significant when compared with the total transaction price from the entire contract, not the transaction price allocated to the performance obligation).

When a contract includes variable consideration, an entity should update both its estimate of the transaction price and its evaluation of the constraint throughout the term of the contract to depict conditions that exist at each reporting date.

How we see it

Some E&C entities have had to change their processes for making estimates of variable consideration (e.g., award and incentive fees) and their conclusions about the timing of variable consideration to include in the transaction price due to the requirement to estimate variable consideration after considering the constraint, even if they applied the legacy guidance in ASC 605-35 and already estimated variable consideration they expected to earn.

Customer-furnished materials

In certain E&C contracts, the customer may choose to procure and provide to the contractor certain materials that are necessary for the entity to complete a project. In other circumstances, the contractor may purchase and pay for the required materials using the customer's procurement and purchase functions.

When a customer furnishes goods or services (e.g., materials, equipment, labor) to facilitate the contractor's fulfillment of the contract, the contractor assesses whether it obtains control of those contributed goods or services. Refer to the section *Principal versus agent considerations* below for further information on evaluating whether the contractor has obtained control of the contributed goods or services.

When a contractor determines it obtained control of the contributed goods or services, the contractor accounts for the contributed goods or services as noncash consideration received from the customer. The fair value of the noncash consideration, measured at contract inception, is included in the transaction price, and any changes in the fair value of the noncash consideration from contract inception through the date it is received do not affect the transaction price.[14] If an entity cannot reasonably estimate the fair value of noncash consideration, it should measure the noncash consideration indirectly by reference to the standalone selling prices of the promised goods or services.

When a contractor determines it has not obtained control of the contributed goods or services, the contractor does not include the contributed goods or services in the transaction price.

Measuring progress

Revenue from many E&C contracts is recognized over time as the entity transfers control of the promised goods or services to the customer (see Step 5 in the appendix for a discussion of the criteria for determining whether a promised good or service is satisfied over time). When a performance obligation is satisfied over time, the standard provides two types of methods that can be used to measure progress under the contract: input method and output method. An entity should select a single measure of progress for each performance obligation that depicts the entity's performance in transferring control of goods or services promised to a customer.

If an entity does not have a reasonable basis to measure its progress, revenue should not be recognized until progress can be measured. However, if an entity can determine that a loss will not be incurred, the standard[15] requires the entity to recognize revenue up to the amount of costs incurred.

How we see it

For performance obligations that meet the criteria to be recognized over time, revenue recognition begins when reasonable estimates of progress can be made. This represented a change for entities that historically applied the completed contract method under legacy guidance because their contracts didn't meet the conditions for using the percentage-of-completion method at contract inception (i.e., reasonably dependable estimates could not be made at contract inception). ASC 605-35 did not allow entities to change from the completed-contract method to the percentage-of-completion method.

Recognizing revenue to reflect costs an entity incurs but expects to recover is consistent with the legacy guidance in ASC 605-35 that allowed for zero-margin revenue recognition when a final outcome could not be estimated but an entity was assured that no loss would be incurred.

Input methods

Input methods recognize revenue based on an entity's efforts or inputs toward satisfying a performance obligation relative to the total expected efforts or inputs to satisfy the performance obligation. Examples of input methods mentioned in the standard include costs incurred, time elapsed, resources consumed or labor hours expended.

Measures of progress similar to Alternative B in ASC 605-35 aren't acceptable under the new standard.

How we see it

The standard requires the use of measures of progress that focus solely on the entity's performance in transferring control of the goods or services. The legacy guidance in ASC 605-35 provided the following two alternatives that E&C entities could use to compute income under the percentage-of-completion method: multiplying estimated total revenue by the percentage of completion (Alternative A) or multiplying estimated total gross profit by the percentage of completion plus costs incurred (Alternative B). Measures based on gross margin, which are similar to Alternative B in ASC 605-35, aren't acceptable under the new standard.

While an entity may use certain input methods similar to legacy GAAP (e.g., using costs incurred, which is similar to Alternative A in ASC 605-35), all E&C entities need to carefully evaluate their contracts to determine an appropriate method.

E&C entities using an input method, such as a cost-based input method, may find that certain inputs do not contribute to their progress in satisfying a performance obligation (e.g., costs related to wasted materials or other significant inefficiencies that were not reflected in the price of the contract). The standard requires entities to exclude these costs from their measure of progress.

The FASB noted in ASC 606-10-55-21(b) that "when a cost incurred is not proportionate to its progress in satisfying the performance obligation, in those circumstances, the best depiction of the entity's performance may be to adjust the input method to recognize revenue only to the extent of that cost incurred. For example, a faithful depiction of an entity's performance might be to recognize revenue at an amount equal to the cost of a good used to satisfy a performance obligation if the entity expects at contract inception that all of the following conditions would be met:

- The good is not distinct.
- The customer is expected to obtain control of the good significantly before receiving services related to the good.

- The cost of the transferred good is significant relative to the total expected costs to completely satisfy the performance obligation.
- The entity procures the good from a third party and is not significantly involved in designing and manufacturing the good (but the entity is acting as a principal in accordance with paragraphs 606-10-55-36 through 55-40)."

Example 19 in the standard[16] illustrates how uninstalled materials are considered in a cost-to-cost calculation. This example can also be found in section 7.1.4.2 of our revenue FRD.

How we see it

The guidance in the revenue standard for considering uninstalled materials when calculating the entity's performance to date differs from the legacy guidance in ASC 605-35. The standard provides for recognition of revenue equal to the costs incurred (i.e., zero margin) when certain conditions related to uninstalled materials are met. In contrast, when applying the legacy guidance, no revenue was recognized when costs were incurred for uninstalled materials that were not unique to the project.

When costs for uninstalled materials are excluded from the measure of progress and those materials are subsequently installed, entities need to apply significant judgment in determining whether the costs should be included in the measure of progress or excluded from the measure of progress for the duration of the contract based on its assessment of which treatment best depicts the entity's performance in the contract.

Output methods

Output methods recognize revenue on the basis of direct measurements of the value to the customer of the goods or services transferred to date relative to the value of the remaining goods or services promised under the contract. Output methods include surveys of performance completed to date, appraisals of results achieved, milestones reached, time elapsed, and units produced or units delivered.

An output method may be an appropriate depiction of a contractor's performance if it directly measures the value of the goods and services transferred to the customer. However, it would not provide an appropriate measure of transfer of control if it fails to measure some of the goods or services for which control has transferred to the customer.

E&C entities with performance obligations satisfied over time should consider that the Board said[17] output methods based on units delivered or units produced may not be appropriate if (1) there is material work in process at the end of the reporting period (e.g., customer-controlled assets are created before delivery or before construction is complete) or (2) the contract provides both design and production services because each item produced may not transfer an equal amount of value to the customer (e.g., the items produced earlier likely have a higher value than the ones produced later). However, the Board[18] indicated that units of delivery may be an appropriate method for certain long-term manufacturing contracts of standard items that individually transfer an equal amount of value to the customer.

The FASB provided a practical expedient in ASC 606-10-55-18 for using an output method to measure progress toward completion of a performance obligation that is satisfied over time. If an entity demonstrates that the invoiced amount corresponds directly with the value to the customer of the entity's performance completed to date, the practical expedient allows an entity to recognize revenue in the amount for which it has the right to invoice (i.e., the "right to invoice" practical expedient).

Contract costs

ASU 2014-09 also provided guidance on other assets and deferred costs relating to contracts with customers, which is codified in ASC 340-40, *Other Assets and Deferred Costs — Contracts with Customers.* This guidance specifies the accounting for the incremental costs an entity incurs to obtain a contract and for the costs incurred to fulfill a contract to provide goods and services to customers if those costs are not within the scope of other US GAAP. ASU 2014-09 superseded the guidance for contract costs in ASC 605-35, so E&C entities follow the guidance in ASC 340-40.

Costs to obtain a contract

Under ASC 340-40, the incremental costs of obtaining a contract (i.e., costs that would not have been incurred if the contract had not been obtained) are recognized as an asset if the entity expects to recover those costs. The standard cites sales commissions that are related to sales from contracts signed during the period as an example of an incremental cost that may require capitalization. In contrast, some bonuses and other compensation that is based on other quantitative or qualitative metrics (e.g., profitability, earnings per share, performance evaluations) likely do not meet the criteria for capitalization because they are not incremental costs directly related to obtaining a contract and, therefore, should be recognized as an expense when incurred.

Costs to fulfill a contract

ASC 340-40 also includes guidance for recognizing costs incurred to fulfill a contract (i.e., costs that relate to a contract, such as materials and labor) that are not in the scope of another ASC topic. Entities recognize an asset when costs incurred to fulfill a contract meet all of the following criteria:

- The costs relate directly to a contract or to an anticipated contract that the entity can specifically identify (e.g., costs of designing an asset to be transferred under a specific contract that has not yet been approved).
- The costs generate or enhance resources of the entity that will be used in satisfying performance obligations in the future.
- The costs are expected to be recovered.

Significant judgment may be required to determine whether costs generate or enhance resources of the entity that will be used in satisfying performance obligations in the future. In the Basis for Conclusions of ASU 2014-09,[19] the FASB explained that ASC 340-40 results in the capitalization of only costs that meet the definition of an asset and precludes an entity from deferring costs merely to normalize profit margins throughout a contract by allocating revenue and costs evenly over the contract term.

For costs to meet the "expected to be recovered" criterion, the costs need to be either explicitly reimbursable under the contract or reflected through the pricing on the contract and recoverable through margin.

ASC 340-40-25-8(c) states that if a performance obligation (or a portion of a performance obligation that is satisfied over time) has been satisfied, fulfillment costs related to that performance obligation (or portion thereof) can no longer be capitalized. This is true even if the associated revenue has not yet been recognized (e.g., the contract consideration is variable and has been fully or partially constrained). Once an entity has begun satisfying a performance obligation that is satisfied over time, it should only capitalize costs that relate to future performance. Accordingly, it may be challenging for an entity to capitalize costs

related to a performance obligation that an entity has already started to satisfy. Under ASC 340-40-25-8(d), if an entity is unable to determine whether certain costs relate to past or future performance, and the costs are not eligible for capitalization under other US GAAP guidance, the costs are expensed as incurred.

Consider the following example[20]:

Illustration 5 — Example of costs to fulfill a contract related to past performance
An entity enters into a contract with a customer to construct a building. It identifies a single performance obligation, being the promise to transfer the building to the customer, which it expects will take three years to complete. The entity satisfies this performance obligation (and recognizes revenue) over time in accordance with ASC 606-10-25-27(c) because its performance does not create an asset with alternative use, and it has an enforceable right to payment (see section 7.1.3 in our FRD publication, ***Revenue from contracts with customers (ASC 606)***). As of the end of the reporting period, the entity has begun constructing the building and has incurred costs related to laying the foundation of the building. We believe that the foundation costs related to construction work done on the partly constructed building, which has been transferred to the customer. Therefore, the costs relate to the entity's past performance in partially satisfying its performance obligation and, in accordance with ASC 340-40-25-8, should be expensed as incurred. That is, the costs do not meet the criteria to be recognized as an asset under ASC 340-40.

If an entity is unable to determine whether certain costs relate to past or future performance, and the costs are not eligible for capitalization under other US GAAP guidance, the costs are expensed as incurred.

Precontract costs

Precontract costs are often incurred in anticipation of a contract and will result in no future benefit unless the contract is obtained. Examples include:

- Engineering, design or other activities performed on the basis of commitments, or other indications of interest, by a customer
- Costs for production equipment and materials relating to specific anticipated contracts (e.g., costs for the purchase of production equipment, materials or supplies)
- Costs incurred to acquire or produce goods in excess of contractual requirements in anticipation of subsequent orders for the same item

Precontract costs that are incurred in anticipation of a specific contract should first be evaluated for capitalization under other authoritative literature (e.g., ASC 330, *Inventory;* ASC 360, *Property, Plant, and Equipment*). Precontract costs incurred in anticipation of a specific contract that are not addressed under other authoritative literature will be capitalized under ASC 340-40 only if they meet all of the criteria of a cost incurred to fulfill a contract. Precontract costs that do not meet the criteria under ASC 340-40 should be charged to expense as incurred.

Mobilization costs

E&C entities need to evaluate whether mobilization activities, such as costs to move personnel, equipment and supplies to the project site; calibrate tools and machinery; and construct temporary facilities that will be used to satisfy a performance obligation, transfer a good or service to the customer and, therefore, represent a separate performance obligation. Costs within the scope of ASC 340-40 that do not transfer a good or service to the customer should be capitalized if they meet the criteria under ASC 340-40, as discussed above.

Principal versus agent considerations

The standard states that when other parties are involved in providing goods or services to an entity's customer, the entity must determine whether its performance obligation is to provide the good or service itself (i.e., the entity is a principal) or to arrange for another party to provide the good or service (i.e., the entity is an agent). The determination of whether the entity is acting as a principal or an agent will affect the amount of revenue the entity recognizes (i.e., whether it recognizes revenue on a gross or net basis).

Appropriately identifying the good or service to be provided and whether the entity controls the specified good or service before it is transferred to the customer are critical steps in determining whether an entity is a principal or an agent in a transaction. An entity cannot provide the specified good or service to a customer (and, therefore, be a principal) unless it controls that good or service prior to transfer.

When another party is involved in providing goods or services to a customer, an entity is a principal if it obtains control of:

- A good or another asset from the other party that it then transfers to the customer
- A right to a service to be performed by the other party, which gives the entity the ability to direct that party to provide the service to the customer on the entity's behalf
- A good or service from the other party that the entity combines with other goods or services in providing the specified good or service to the customer

The determination of whether the entity is acting as a principal or an agent will affect whether it recognizes revenue on a gross or net basis.

An entity may be considered the principal when it engages another party (e.g., a subcontractor) to satisfy some or all of the performance obligations on its behalf. An entity could control the right to the specified service and be a principal by entering into a contract with the subcontractor under which the entity defines the scope of service to be performed by the subcontractor on its behalf. This situation is equivalent to the entity fulfilling the contract using its own resources, and the entity remains responsible for the satisfactory provision of the specified service in accordance with the contract with the customer.

In contrast, when the specified service is provided by another party and the entity does not have the ability to direct those services, the entity typically is an agent because the entity is facilitating, rather than controlling the rights to, the service.

Because it still may not be clear whether an entity controls the specified good or service after considering the guidance discussed above, the standard provides three indicators of when an entity controls the specified good or service and is, therefore, a principal. These indicators focus on whether (1) the entity is primarily responsible for fulfilling the promise to provide the good or service to the customer, (2) the entity has inventory risk before the specified good or service has been transferred to the customer and (3) the entity has discretion in establishing the price for the specified good or service.

A principal's performance obligations in a contract differ from those of an agent. An entity is a principal if it controls the specified good or service before that good or service is transferred to a customer. For example, if an E&C entity obtains control of building materials from another party before it transfers those materials to the customer (i.e., installs them), the entity's performance obligation may be to provide the materials and installation itself as part of a larger performance obligation to construct a building. Hence, the entity may be acting as a principal and should recognize revenue in the gross amount to which it is entitled.

In contrast, an entity is an agent if it does not control a specified good or service before that good or service is transferred to a customer. An entity may not control a specified good if the entity obtains legal title to that good only momentarily before legal title is transferred to a customer. All factors in such an arrangement would need to be considered in assessing whether the entity controls a good or service.

An entity is an agent if its performance obligation is to arrange for the provision of the specified good or service by another party. For example, if an E&C entity is acting as a project manager and facilitates the procurement of materials or identifies trade contractors for the customer in exchange for a fee or commission and does not control the goods or services, the performance obligation is likely to arrange for another party to provide the goods or services to the customer, and the entity is likely acting as an agent.

How we see it

An E&C entity needs to carefully evaluate whether it is a principal or an agent. Although the new guidance is similar to legacy guidance, there are some notable differences that may affect an entity's judgments and conclusions about whether it is acting as a principal or an agent. For example, the standard requires an entity to consider whether it has control of the goods and services as part of the evaluation. In addition, it removes certain indicators and the requirement under the legacy guidance to weight certain indicators in the principal versus agent determination more heavily than others.

How registrants determine whether they are a principal or an agent has been an area of frequent comment by the SEC staff. The SEC staff has requested that registrants provide an analysis supporting their determination, including details of the nature of the goods or services being provided to the customer.

E&C service contracts

E&C entities often enter into service contracts (e.g., project management, design and engineering, procurement, operations and maintenance). The nature of these contracts may vary significantly, so E&C entities need to carefully evaluate the contract terms in order to appropriately identify performance obligations, allocate consideration and measure progress toward satisfaction of the performance obligation.

When determining the performance obligation(s) in a service contract, E&C entities may conclude that the services are part of a series of distinct services that are substantially the same and have the same pattern of transfer to the customer. Services that meet both of the criteria described in Step 2 in the appendix (i.e., represent a performance obligation satisfied over time and would have the same measure of progress toward satisfaction of the performance obligation if accounted for separately) must be accounted for as a single performance obligation.

TRG members generally agreed[21] that when determining whether distinct goods and services are substantially the same, entities should first determine the nature of the promise because a series could consist of either specified quantities of the goods and services or distinct time increments. That is, if the nature of the promise is to deliver a specified quantity of service (e.g., routine monthly maintenance of an asset over a defined contract period), the entity should consider whether each service is distinct and substantially the same as the others. In contrast, if the nature of the entity's promise is to provide a single service for a period of time (i.e., because there is an unspecified quantity to be delivered), the entity should consider whether each *time increment* (e.g., hour, day), rather than the underlying activities, is distinct and substantially the same.

For example, the activities an E&C entity performs could vary within a day and from day to day, but that would not prevent the entity from concluding that the daily services are distinct, substantially the same and have the same pattern of transfer and should, therefore, be combined as a series of distinct services that form a single performance obligation.

Example 12A in the standard[22] illustrates a series of distinct services that meet the criteria to be accounted for as a single performance obligation under the series provision. This example can also be found in section 4.2.3 of our revenue FRD.

How we see it

Judgment is required to evaluate whether project management, construction supervision or engineering services provided by E&C entities meet the criteria to be a series of distinct services that are substantially the same and have the same pattern of transfer.

For contracts with variable consideration (e.g., performance bonuses or fees earned based on hours incurred), identifying a series of distinct services as a single performance obligation could affect how the consideration is allocated. This is because variable consideration may be allocated to one or more, but not all, distinct services in a performance obligation if certain criteria are met, as described in Step 4 in the appendix.

The following example illustrates the application of the guidance for allocating variable consideration by an engineering services company that determines that the services it provides represent a series of distinct services that form part of a single performance obligation:

Illustration 6 — Engineering services with variable consideration

On 1 January 20X9, Engineer V enters into a one-year contract with a municipality to provide engineering consultation services for a sewer project. Engineer V receives a fee of $100 for each hour incurred (i.e., variable consideration based on effort expended).

Analysis

Assume that Engineer V concludes that it has a single performance obligation to provide engineering services over time because it will provide a series of distinct services that are substantially the same and that have the same pattern of transfer to the customer. That is, while the specific activities that occur each day may vary, the overall service of providing engineering services each day is substantially the same over the duration of the contract.

Engineer V determines that the transaction price is allocated to the services provided within each period because the hours incurred during the period relate specifically to its efforts to satisfy the performance obligation, and the allocation is consistent with the objective of allocating an amount that depicts the consideration to which the entity expects to be entitled in exchange for transferring the promised services.

For example, if Engineer V provides 800 hours of services during the first quarter of 20X9, it would recognize revenue of $80,000 (800 hours x $100 per hour) at 31 March 20X9.

In some cases, an E&C entity may determine that a contract contains multiple distinct services (e.g., planning, design, construction support) that are not substantially the same and may conclude that it has multiple performance obligations. This conclusion may affect the timing and pattern of revenue recognition. Refer to the *Identifying performance obligations in E&C contracts* section above for additional guidance on identifying performance obligations.

How we see it

Some entities have found that recognizing fees that relate specifically to the entity's efforts to transfer the service in a distinct period is relatively straightforward. However, for contracts that contain multiple forms of consideration that relate to a single performance obligation, the allocation may be more complex. For example, a contract could also include a fixed fee that would be recognized over the term of the contract using the entity's selected measure of progress (e.g., time elapsed, hours incurred), which may differ from the pattern in which the variable consideration is recognized under the variable consideration allocation exception.

Other measurement and recognition topics

Loss contracts

The FASB retained and made certain amendments to legacy guidance in ASC 605-35 for contracts in the scope of that standard that the entity expects to result in a loss.

Therefore, E&C entities follow the amended expected loss guidance in ASC 605-35. The updated guidance in ASC 605-35 requires entities to use the principles in ASC 606 to determine the transaction price (except for the guidance on constraining estimates of variable consideration) for purposes of estimating the expected loss on the contract.

The guidance for evaluating loss contracts in ASC 605-35 was retained with certain amendments.

The Board amended this guidance to clarify that the loss contract test is performed at the contract level (but an entity can make an accounting policy election to perform it at the performance obligation level).

Because ASC 605-35 provides an accounting policy election permitting losses to be determined at either the contract level or the performance obligation level, we believe that the determination of a loss provision could be made at the contract level and include all performance obligations in the ASC 606 contract, even if some performance obligations are not in the scope of ASC 605-35. Alternatively, if an entity elects to determine losses at the performance obligation level, we believe that a loss provision should only be recorded for performance obligations that are in the scope of ASC 605-35. Entities should consider the updated guidance and terminology when applying the guidance to loss contracts.

The following example illustrates the two acceptable ways to determine a loss provision under ASC 605-35:

Illustration 7 — Loss contract

Company B is a contractor that builds and maintains power plants as one of its service lines. Company B entered into a contract with Customer D to provide construction-type services to build a power plant and provide maintenance services on the power plant once it is operational for total consideration of $1,000,000. The contract with Customer D is in the scope of ASC 606. Company B determined that the construction-type services and the maintenance services are separate performance obligations. The construction-type services are also in the scope of ASC 605-35, but the maintenance services are not.

Company B determines the revenue, estimated cost, and estimated profit or loss for each performance obligation noting the following:

	Construction service	Maintenance service	Total services
Revenue	$ 700,000	$ 300,000	$ 1,000,000
Estimated costs	$ 900,000	$ 200,000	$ 1,100,000
Estimated (loss)/profit	$ (200,000)	$ 100,000	$ (100,000)

Company B expects to incur a total net loss of $100,000 for the entire contract.

Method A (contract level) — The determination of whether a loss exists and the amount of the loss provision, if any, would be made at the contract level and include all performance obligations in the ASC 606 contract. This method would result in a $100,000 loss because the total contract has an estimated loss of $100,000.

Method B (performance obligation level) — The determination of whether a loss exists and the amount of the loss provision, if any, would be made at the performance obligation level and only include performance obligations that are in the scope of ASC 605-35. This method would result in a $200,000 loss being recorded for the construction-type services because this is the only performance obligation that is in the scope of ASC 605-35 and is anticipated to incur a loss (this loss is not offset by the profit on the maintenance service).

How we see it

Legacy GAAP required that the loss contract test be performed at the total contract level unless the contract was segmented or combined. Under ASC 606, a performance obligation is not equivalent to the legacy contract segmentation concept. Accordingly, the Board noted in the Basis for Conclusions of ASU 2016-20[23] that the application of this new policy election in ASC 605-35 may result in a loss amount that is different from the amount that would have been calculated under legacy GAAP because, in some cases, performance obligations may not equate to previous individual segments.

Contract assets and contract liabilities

The guidance in the revenue standard is based on the notion that a contract asset or contract liability is generated when either party to a contract performs. When the customer performs first — for example, by prepaying its promised consideration — the entity has a contract liability. When an entity satisfies a performance obligation by transferring a promised good or service, the entity has earned a right to consideration from the customer and, therefore, has a contract asset.

Contract assets may represent conditional or unconditional rights to consideration. The right is conditional, for example, when an entity first must satisfy another performance obligation in the contract before it is entitled to payment from the customer. If an entity has an unconditional right to receive consideration from the customer, the contract asset is accounted for as a receivable and presented separately from other contract assets. A right is unconditional if nothing other than the passage of time is required before payment of that consideration is due. This could be before the entity invoices the customer.

Under the standard, entities are not required to use the terms "contract asset" or "contract liability" in the statement of financial position, but an entity that uses an alternative description needs to provide sufficient information so that users of the financial statements can clearly distinguish between an unconditional right to consideration (a receivable) and a conditional right to receive consideration (a contract asset). Refer to section 10.1 of our revenue FRD for discussion of contract assets and contract liabilities.

After initial recognition, receivables and contract assets are subject to an impairment assessment in accordance with ASC 310, *Receivables*, or ASC 326, *Financial Instruments — Credit Losses,* upon adoption. In addition, if there is a difference between the initial measurement of the receivable under ASC 310 or ASC 326 and the corresponding amount of revenue, that difference should be presented as an expense (i.e., as an impairment loss). Impairment losses resulting from contracts with customers are presented separately from losses on other contracts in accordance with ASC 606-10-50-4(b).

How we see it

Under the standard, the timing of the reclassification of a balance from a contract asset to accounts receivable may differ from that of the reclassification of an unbilled receivable to a billed receivable under legacy GAAP. For example, a contractor should record a receivable (rather than a contract asset) for revenue recognized prior to submitting a progress billing once the contractor has transferred control of goods or services and has an unconditional right to receive the consideration from the customer.

Under legacy guidance in ASC 605-35, entities recorded assets for unbilled accounts receivable when revenue was recognized but not billed. Once the invoice was submitted to the customer, the unbilled receivable was reclassified as a billed account receivable. Similarly, billings in excess of costs were generally recognized as liabilities.

The timing of the reclassification of a balance from a contract asset to accounts receivable may differ from that of the reclassification of an unbilled receivable to a billed receivable under legacy GAAP.

Warranties

Warranties are commonly included in contracts to sell goods or services, and they may be explicitly stated or implied based on the entity's customary business practices. The revenue standard identifies two types of warranties.

Assurance-type warranties

Warranties that promise the customer that the delivered product or service is as specified in the contract are called "assurance-type warranties." The Board concluded that assurance-type warranties do not provide an additional good or service to the customer (i.e., they are not separate performance obligations). By providing this type of warranty, the selling entity has effectively provided a guarantee of quality. For example, E&C entities often provide various warranties against construction defects and the failure of certain operating systems for a period of time. Under the standard, these types of warranties are accounted for as warranty obligations, and the estimated cost of satisfying them is accrued in accordance with the guidance for warranty obligations incurred in connection with the sale of goods or services in in ASC 460, *Guarantees*. This guidance says that losses from warranty obligations are accrued when the conditions in ASC 450-20-25-2 are met (i.e., it is probable that an asset has been impaired or a liability incurred and the amount of loss can be reasonably estimated).

Because assurance-type warranties are accounted for outside of the scope of ASC 606, the costs of satisfying an assurance-type warranty are excluded if an entity elects to use a costs-incurred measure of progress for over-time revenue recognition (i.e., excluded from both the numerator and the denominator in the costs incurred measure of progress calculation).

Service-type warranties

Warranties that provide a service to the customer in addition to assurance that the delivered product is as specified in the contract are called "service-type warranties." If the customer has the option to purchase the warranty separately or if the warranty provides a service to the customer beyond fixing defects that existed at the time of sale, the entity is providing a service-type warranty. The Board determined[24] that this type of warranty represents a distinct service and is a separate performance obligation. Therefore, the entity allocates a portion of the transaction price to the warranty based on the relative standalone selling price of the warranty. The entity then recognizes revenue allocated to the warranty over the period the warranty service is provided because the customer likely receives and consumes the benefits of the warranty as the entity performs.

Endnotes:

[1] ASC 606, *Revenue from Contracts with Customers*, as amended, was created by ASU 2014-09, *Revenue from Contracts with Customers*, and various amendments.

[2] ASU 2020-05, *Revenue from Contracts with Customers (Topic 606) and Leases (Topic 842): Effective Dates for Certain Entities*.

[3] ASU 2016-13, *Financial Instruments — Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*.

[4] Paragraph BC107 of ASU 2014-09.

[5] Ibid.

[6] Ibid.

[7] 31 October 2014 TRG meeting; agenda paper no. 10.

[8] 9 November 2015 TRG meeting; agenda paper no. 48.

[9] ASC 606-10-55-134 through 55-135.

[10] ASC 606-10-55-129 through 55-133.

[11] ASC 606-10-55-197 through 55-200.

[12] Paragraph BC217 of ASU 2014-09.

[13] 26 January 2015 TRG meeting; agenda paper no. 14.

[14] This statement applies only to transactions that are in the scope of the new guidance. Nonmonetary exchanges between entities in the same line of business that are arranged to facilitate sales to third parties (i.e., the entities involved in the exchange are not the end consumer) are excluded from the scope of the new guidance.

[15] ASC 606-10-25-37.

[16] ASC 606-10-55-187 through 55-192.

[17] Paragraph BC166 of ASU 2014-09.

[18] ASC 606-10-25-37.

[19] Paragraph BC308 of ASU 2014-09.

[20] The IFRS Interpretations Committee discussed this example in June 2019 and reached similar conclusions. See *IFRIC Update* June 2019. Refer to the IASB website at https://www.ifrs.org/news-and-events/updates/ifric-updates/june-2019/.

[21] 13 July 2015 TRG meeting; agenda paper no. 39.

[22] ASC 606-10-55-157B through 55-157E.

[23] Paragraph BC12 of ASU 2016-20.

[24] Paragraph BC371 of ASU 2014-09.

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Appendix: The five-step revenue model and contract costs

The standard's core principle is that an entity recognizes revenue at an amount that reflects the consideration to which the entity expects to be entitled in exchange for transferring goods or services to a customer. That principle is applied using five steps that require entities to exercise judgment when considering the terms of their contract(s) and all relevant facts and circumstances. Entities have to apply the requirements of the standard consistently to contracts with similar characteristics and in similar circumstances. This table summarizes the new revenue model and the guidance for contract costs.

Step 1: Identify the contract(s) with the customer
Definition of a contract An entity must first identify the contract, or contracts, to provide goods and services to customers. A contract must create enforceable rights and obligations to fall within the scope of the model in the standard. Such contracts may be written, oral or implied by an entity's customary business practices but must meet the following criteria: ‣ The parties to the contract have approved the contract (in writing, orally or based on their customary business practices) and are committed to perform their respective obligations. ‣ The entity can identify each party's rights regarding the goods or services to be transferred. ‣ The entity can identify the payment terms for the goods or services to be transferred. ‣ The contract has commercial substance (i.e., the risk, timing or amount of the entity's future cash flows is expected to change as a result of the contract). ‣ It is probable that the entity will collect substantially all of the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer. If these criteria are not met, an entity would not account for the arrangement using the model in the standard and would recognize any nonrefundable consideration received as revenue only when certain events have occurred.
Contract combination The standard requires entities to combine contracts entered into at or near the same time with the same customer (or related parties of the customer) if they meet any of the following criteria: ‣ The contracts are negotiated as a package with a single commercial objective. ‣ The amount of consideration to be paid in one contract depends on the price or performance of another contract. ‣ The goods or services promised in the contracts (or some goods or services promised in each of the contracts) are a single performance obligation.
Contract modifications A contract modification is a change in the scope and/or price of a contract. A contract modification is accounted for as a new contract separate from the original contract if the modification adds distinct goods or services at a price that reflects the standalone selling prices of those goods or services. Contract modifications that are not accounted for as separate contracts are considered changes to the original contract and are accounted for as follows: ‣ If the goods and services to be transferred after the contract modification are distinct from the goods or services transferred on or before the contract modification, the entity should account for the modification as if it were the termination of the old contract and the creation of a new contract. ‣ If the goods and services to be transferred after the contract modification are not distinct from the goods and services already provided and, therefore, form part of a single performance obligation that is partially satisfied at the date of modification, the entity should account for the contract modification as if it were part of the original contract. ‣ A combination of the two approaches above: a modification of the existing contract for the partially satisfied performance obligations and the creation of a new contract for the distinct goods and services

Step 2: Identify the performance obligation(s) in the contract

An entity must identify the promised goods and services within the contract and determine which of those goods and services (or bundles of goods and services) are separate performance obligations (i.e., the unit of accounting for purposes of applying the standard). An entity is not required to assess whether promised goods or services are performance obligations if they are immaterial in the context of the contract.

A promised good or service represents a performance obligation if (1) the good or service is distinct (by itself or as part of a bundle of goods or services) or (2) the good or service is part of a series of distinct goods or services that are substantially the same and have the same pattern of transfer to the customer.

A good or service (or bundle of goods or services) is distinct if both of the following criteria are met:

- The customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (i.e., the good or service is capable of being distinct).
- The entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (i.e., the promise to transfer the good or service is distinct within the context of the contract).

In assessing whether an entity's promise to transfer a good or service is separately identifiable from other promises in the contract, entities need to consider whether the nature of the promise is to transfer each of those goods or services individually or to transfer a combined item or items to which the promised goods or services are inputs. Factors that indicate two or more promises to transfer goods or services are not separately identifiable include, but are not limited to, the following:

- The entity provides a significant service of integrating the goods or services with other goods or services promised in the contract into a bundle of goods or services that represent the combined output or outputs for which the customer has contracted.
- One or more of the goods or services significantly modify or customize, or are significantly modified or customized by, one or more of the other goods or services promised in the contract.
- The goods or services are highly interdependent or highly interrelated. In other words, each of the goods or services is significantly affected by one or more of the other goods or services in the contract.

If a promised good or service is not distinct, an entity is required to combine that good or service with other promised goods or services until it identifies a bundle of goods or services that is distinct.

Series guidance

Goods or services that are part of a series of distinct goods or services that are substantially the same and have the same pattern of transfer to the customer must be combined into one performance obligation. To meet the same pattern of transfer criterion, each distinct good or service in the series must represent a performance obligation that would be satisfied over time and would have the same measure of progress toward satisfaction of the performance obligation (both discussed in Step 5), if accounted for separately.

Customer options for additional goods or services

A customer's option to acquire additional goods or services (e.g., an option for free or discounted goods or services) is accounted for as a separate performance obligation if it provides a material right to the customer that the customer would not receive without entering into the contract (e.g., a discount that exceeds the range of discounts typically given for those goods or services to that class of customer in that geographical area or market).

Principal versus agent considerations

When more than one party is involved in providing goods or services to a customer, an entity must determine whether it is a principal or an agent in these transactions by evaluating the nature of its promise to the customer. An entity is a principal and, therefore, records revenue on a gross basis if it controls the specified good or service before transferring that good or service to the customer. An entity is an agent and records as revenue the net amount it retains for its agency services if its

role is to arrange for another entity to provide the specified goods or services. Because it is not always clear whether an entity controls a specified good or service in some contracts (e.g., those involving intangible goods and/or services), the standard also provides indicators of when an entity may control the specified good or service as follows:

- The entity is primarily responsible for fulfilling the promise to provide the specified good or service.
- The entity has inventory risk before the specified good or service has been transferred to a customer or after transfer of control to the customer (e.g., if the customer has a right of return).
- The entity has discretion in establishing the price for the specified good or service.

Step 3: Determine the transaction price

The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer. When determining the transaction price, entities need to consider the effects of all of the following:

Variable consideration

An entity needs to estimate any variable consideration (e.g., amounts that vary due to discounts, rebates, refunds, price concessions, bonuses) using either the expected value method (i.e., a probability-weighted amount method) or the most likely amount method (i.e., a method to choose the single most likely amount in a range of possible amounts). An entity's method selection is not a "free choice" and must be based on which method better predicts the amount of consideration to which the entity will be entitled. To include variable consideration in the estimated transaction price, the entity has to conclude that it is probable that a significant revenue reversal will not occur in future periods. This "constraint" on variable consideration is based on the probability of a reversal of an amount that is significant relative to cumulative revenue recognized for the contract. The standard provides factors that increase the likelihood or magnitude of a revenue reversal, including the following: the amount of consideration is highly susceptible to factors outside the entity's influence, the entity's experience with similar types of contracts is limited or that experience has limited predictive value, or the contract has a large number and broad range of possible outcomes. The standard requires an entity to estimate variable consideration, including the application of the constraint, at contract inception and update that estimate at each reporting date.

Significant financing component

An entity needs to adjust the transaction price for the effects of the time value of money if the timing of payments agreed to by the parties to the contract provides the customer or the entity with a significant financing benefit. As a practical expedient, an entity can elect not to adjust the transaction price for the effects of a significant financing component if the entity expects at contract inception that the period between payment and performance will be one year or less.

Noncash consideration

When an entity receives, or expects to receive, noncash consideration (e.g., property, plant or equipment; a financial instrument), the fair value of the noncash consideration at contract inception is included in the transaction price.

Consideration paid or payable to the customer

Consideration payable to the customer includes cash amounts that an entity pays, or expects to pay, to the customer, credits or other items (vouchers or coupons) that can be applied against amounts owed to the entity or equity instruments granted in conjunction with selling goods or services. An entity should account for consideration paid or payable to the customer as a reduction of the transaction price and, therefore, of revenue unless the payment to the customer is in exchange for a distinct good or service. However, if the payment to the customer exceeds the fair value of the distinct good or service received, the entity should account for the excess amount as a reduction of the transaction price.

Step 4: Allocate the transaction price to the performance obligations in the contract

For contracts that have multiple performance obligations, the standard generally requires an entity to allocate the transaction price to the performance obligations in proportion to their standalone selling prices (i.e., on a relative standalone selling price basis). When allocating on a relative standalone selling price basis, any discount within the contract generally is allocated proportionately to all of the performance obligations in the contract. However, there are two exceptions.

One exception requires variable consideration to be allocated entirely to a specific part of a contract, such as one or more (but not all) performance obligations or one or more (but not all) distinct goods or services promised in a series of distinct goods or services that forms part of a single performance obligation, if both of the following criteria are met:

- The terms of a variable payment relate specifically to the entity's efforts to satisfy the performance obligation or transfer the distinct good or service.
- Allocating the variable consideration entirely to the performance obligation or the distinct good or service is consistent with the objective of allocating consideration in an amount that depicts the consideration to which the entity expects to be entitled in exchange for transferring the promised goods or services to the customer.

The other exception requires an entity to allocate a contract's entire discount to only those goods or services to which it relates if certain criteria are met.

To allocate the transaction price on a relative standalone selling price basis, an entity must first determine the standalone selling price of the distinct good or service underlying each performance obligation. The standalone selling price is the price at which an entity would sell a good or service on a standalone (or separate) basis at contract inception. Under the model, the observable price of a good or service sold separately in similar circumstances to similar customers provides the best evidence of standalone selling price. However, in many situations, standalone selling prices will not be readily observable. In those cases, the entity must estimate the standalone selling price by considering all information that is reasonably available to it, maximizing the use of observable inputs and applying estimation methods consistently in similar circumstances. The standard states that suitable estimation methods include, but are not limited to, an adjusted market assessment approach, an expected cost plus a margin approach or a residual approach (if certain conditions are met).

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation

An entity recognizes revenue only when (or as) it satisfies a performance obligation by transferring control of the promised good(s) or service(s) to a customer. The transfer of control can occur over time or at a point in time.

A performance obligation is satisfied at a point in time unless it meets one of the following criteria, in which case it is satisfied over time:

- The customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs.
- The entity's performance creates or enhances an asset that the customer controls as the asset is created or enhanced.
- The entity's performance does not create an asset with an alternative use to the entity, and the entity has an enforceable right to payment for performance completed to date.

The transaction price allocated to performance obligations satisfied at a point in time is recognized as revenue when control of the goods or services transfers to the customer. If the performance obligation is satisfied over time, the transaction price allocated to that performance obligation is recognized as revenue as the performance obligation is satisfied. To do this, the standard requires an entity to select a single revenue recognition method (i.e., measure of progress) that faithfully depicts the pattern of the transfer of control over time (i.e., an input method or an output method).

Licenses of intellectual property

The standard provides guidance on the recognition of revenue for licenses of intellectual property (IP) that differs from the model for other promised goods and services. The nature of the promise in granting a license of IP to a customer is either:

- A right to access the entity's IP throughout the license period (a right to access)
- A right to use the entity's IP as it exists at the point in time in which the license is granted (a right to use)

To determine whether the entity's promise is to provide a right to access its IP or a right to use its IP, the entity should consider the nature of the IP to which the customer will have rights. The standard requires entities to classify IP in one of two categories:

- Functional: This IP has significant standalone functionality (e.g., many types of software; completed media content, such as films, television shows and music). Licenses of functional IP generally grant a right to use the entity's IP, and revenue for these licenses generally is recognized at the point in time when the IP is made available for the customer's use and benefit. This is the case if the functionality is not expected to change substantially as a result of the licensor's ongoing activities that do not transfer an additional promised good or service to the customer. If the functionality of the IP is expected to substantively change because of activities of the licensor that do not transfer additional promised goods or services, and the customer is contractually or practically required to use the latest version of the IP, revenue for the license is recognized over time. However, we expect licenses of functional IP to meet the criteria to be recognized over time infrequently, if at all.
- Symbolic: This IP does not have significant standalone functionality (e.g., brands, team and trade names, character images). The utility (i.e., the ability to provide benefit or value) of symbolic IP is largely derived from the licensor's ongoing or past activities (e.g., activities that support the value of character images). Licenses of symbolic IP grant a right to access an entity's IP, and revenue from these licenses is recognized over time as the performance obligation is satisfied (e.g., over the license period).

Revenue cannot be recognized from a license of IP before both (1) an entity provides (or otherwise makes available) a copy of the IP to the customer and (2) the beginning of the period during which the customer is able to use and benefit from its right to access or its right to use the IP.

The standard specifies that sales- and usage-based royalties on licenses of IP are recognized when the later of the following events occurs: (1) the subsequent sales or usage occurs or (2) the performance obligation to which some or all of the sales-based or usage-based royalty has been allocated has been satisfied (or partially satisfied). This guidance must be applied to the overall royalty stream when the sole or predominant item to which the royalty relates is a license of IP (i.e., these types of arrangements are either entirely in the scope of this guidance or entirely in the scope of the general variable consideration constraint guidance).

Contract costs

ASC 340-40 specifies the accounting for costs an entity incurs to obtain and fulfill a contract to provide goods and services to customers. The incremental costs of obtaining a contract (i.e., costs that would not have been incurred if the contract had not been obtained) are recognized as an asset if the entity expects to recover them. ASC 340-40 cites commissions as a type of incremental costs that may require capitalization. The standard provides a practical expedient that permits an entity to immediately expense contract acquisition costs when the asset that would have resulted from capitalizing these costs would have been amortized in one year or less.

An entity accounts for costs incurred to fulfill a contract with a customer that are within the scope of other authoritative guidance (e.g., inventory; property, plant and equipment; internal-use software) in accordance with that guidance. If the costs are not in the scope of other accounting guidance, an entity recognizes an asset from the costs incurred to fulfill a contract only if those costs meet all of the following criteria:

- The costs relate directly to a contract or to an anticipated contract that the entity can specifically identify.
- The costs generate or enhance resources of the entity that will be used in satisfying (or in continuing to satisfy) performance obligations in the future.
- The costs are expected to be recovered.

Any capitalized contract costs are amortized, with the expense recognized as an entity transfers the related goods or services to the customer. Any asset recorded by the entity is subject to an impairment assessment.