Revenue for manufacturers

The new standard’s effective date is coming.

US GAAP
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Revenue viewed through a new lens

Again and again, we are asked what’s changed under the new standard: what do I need to tweak in my existing accounting policies for revenue? It’s just not that simple.

The new standard introduces a core principle that requires companies to evaluate their transactions in a new way. It requires more judgment and estimation than today’s accounting and provides new guidance to determine the units of account in a customer contract. The transfer of control of the goods or services to the customer drives the amount and pattern of revenue recognition; this is a change from the existing risks and rewards model. As a result, there will be circumstances in which there will be a change in the amount and timing of revenue recognition.

Less has been said about disclosures, but the new standard requires extensive new disclosures. Read this to understand some of the most significant issues for manufacturers – the issues that you should be considering now.

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Timing of revenue – over time

Manufacturers that produce goods specifically for an individual customer based on that customer’s design may see an acceleration in the timing of revenue and cost recognition.

Current US GAAP practice generally treats contract and other manufacturing arrangements as product sales. This results in revenue recognition at a point in time – when the manufactured goods are shipped or delivered to the customer – unless the bill-and-hold criteria are met.

Under the new standard, a manufacturer that produces goods designed to a customer’s unique specifications will need to carefully evaluate its contracts. This is because revenue is required to be recognized over time as manufacturing occurs if the customized goods have no alternative use to the manufacturer, and the manufacturer has an enforceable right to payment for performance completed to date.

When evaluating whether the customized goods have an alternative use, the manufacturer considers the goods that will ultimately be transferred to the customer. An enforceable right to payment exists if the manufacturer would be entitled to payment of costs plus a reasonable margin on the work performed to date if the customer were to terminate the contract early for reasons other than the manufacturer’s failure to perform as promised.

This analysis is performed on an individual contract basis for each performance obligation within a contract. Similar goods or services could have different patterns of recognition depending on the rights and obligations in each contract. Manufacturers will need to establish internal controls, policies and procedures to identify contract terms (e.g. a right to payment on termination) that would result in over-time versus point-in-time revenue recognition.

In addition to the over-time criterion related to alternative use and right to payment, the new standard includes two other criteria. These are listed in Step 5: Recognize revenue. Only if none of the over-time criteria are met, will the manufacturer recognize revenue at a Point in time.

Example

Manufacturer A builds products for various customers; however, the design and construction of each product differs substantially on the basis of each customer’s needs.

Manufacturer A enters into a contract to produce a customized product for Customer B. The contract requires Customer B to compensate Manufacturer A for its cost incurred plus a 15% margin if Customer B terminates the contract for reasons other than Manufacturer A’s failure to perform. Manufacturer A uses standard raw materials to manufacturer the customized product. These raw materials are interchangeable with other products until actually deployed in the customer’s customized product. Manufacturer A does not have an enforceable right to payment based solely on the procurement of these standard raw materials. Once the materials are incorporated into the customer’s product there is an enforceable right to payment.

At contract inception, Manufacturer A assesses whether the product, in its completed state, will have an alternative use to Manufacturer A. Although the contract does not preclude Manufacturer A from directing the completed product to another customer, Manufacturer A would incur significant costs to rework the design and functionality of the product. In this example, the customer-specific design of the product restricts Manufacturer A’s practical ability to readily direct the product to another customer. Therefore, the product does not have an alternative use to Manufacturer A.

The contract with Customer B meets the criteria for over-time revenue recognition. Specifically, its performance does not create an asset with an alternative use and Manufacturer A has an enforceable right to payment for performance completed to date. Materials that have not been integrated are inventory and therefore the inability to enforce payment for such costs is not relevant for the analysis.
When the over-time criteria are met, manufacturers will need to determine a method for measuring progress during the manufacturing process. This method should depict performance in transferring control of goods and services to the customer. We expect that many manufacturers that meet the criteria will measure their progress using an input method, such as the cost-to-cost method. The FASB believes that output methods, such as units-of-production or units-of-delivery, do not depict performance if WIP or finished goods controlled by the customer are significant. Therefore, such output methods would need to be modified to reflect the transfer of control for WIP or finished goods. This change means that revenue and gross margin will be recognized earlier for many manufacturers than under current US GAAP. Also, related costs that are currently accounted for as inventory will be expensed as control transfers to the customer. Depending on when standard materials are integrated into products and have no alternative use to the manufacturer, the new standard may have a significant effect on both income statements and balance sheets of manufacturers.

### Example

Assume the same fact pattern as the previous example, but with the following additional information.

- Customized product contract price = $1,000.
- Expected costs = $850, resulting in expected margin of $150, or 15%.
- Manufacturer A uses the cost-to-cost method as the measure of progress to recognize revenue.

The financial statement effect shown below assumes that 50% of cost has been incurred as of the reporting date.

<table>
<thead>
<tr>
<th></th>
<th>Current GAAP: Point-in-time</th>
<th>New standard: Over-time, cost-to-cost method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$0</td>
<td>$500 = $1,000 X 50%</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>$0</td>
<td>$425 = $850 x 50%¹</td>
</tr>
<tr>
<td>Gross margin</td>
<td>$0</td>
<td>$75</td>
</tr>
<tr>
<td>Inventory</td>
<td>$425 = $850 x 50%</td>
<td>$0¹</td>
</tr>
</tbody>
</table>

Note:

¹. All standard materials and work-in-process have been integrated into the product and have no alternative use.

The change to over-time, cost-to-cost method from point-in-time has the effect of accelerating revenue, cost of goods sold and gross margin, and eliminating WIP and finished goods inventory in this example.

### Vertically integrated supply chain

It is common for a manufacturer to have a vertically integrated supply chain that involves two or more manufacturing facilities where one facility produces sub-components (e.g. WIP) and ships to another facility to finalize the products. When customized products that meet the over-time criteria are produced in such a manufacturing chain, the manufacturer is required to measure the manufacturing progress from a consolidated perspective and not account for each sub-component at the individual facility level. This may affect the amount and timing of revenue recognized for each facility’s efforts as revenue is recognized based on the single performance obligation at the consolidated level.

If the cost-to-cost method is used to recognize revenue, the identification of all costs incurred to date and estimated costs to complete will be critical and could be a complex exercise for a manufacturing process that involves multiple manufacturing facilities, perhaps in multiple countries.
Timing of revenue – point in time

Certain types of arrangements will experience a change in the timing of revenue recognition based on when control transfers to the customer.

Under the new standard, if a performance obligation is not satisfied over time, then a manufacturer recognizes revenue at the point in time at which it transfers control of the good or service to the customer. Control refers to the ability to direct the use of, and obtain substantially all of the remaining benefits from, the good or service. The timing of revenue recognition could change in some circumstances as the focus shifts from the transfer of risks and rewards under current US GAAP to the transfer of control under the new standard.

The notion of risks and rewards is only an indicator of control. Other indicators such as legal title, physical possession, right to payment and customer acceptance also need to be evaluated for each arrangement. Depending on the facts and circumstances, revenue satisfied at a point in time could be recognized at a different point than under current US GAAP.

For example, consider shipping arrangements with contractual FOB shipping point delivery terms but the manufacturer promises that all goods lost or damaged in transit will be replaced. This is often referred to as ‘synthetic FOB destination’.

Under current guidance, revenue recognition is generally precluded until the product is delivered to the customer’s destination. This is because the risks and rewards of ownership have not transferred to the customer, despite having satisfied the FOB shipping point delivery terms.

Under the new standard, whether the significant risks and rewards have been transferred is only one indicator of the transfer of control. A manufacturer needs to evaluate all indicators and as a result could reach a different conclusion about the timing of revenue recognition.

Shipping and handling

Accounting for shipping depends on an entity’s policy election.

The accounting for shipping and handling under the new standard depends on whether these activities are performed before or after the customer obtains control of the goods.

- If the shipping and handling occur before the customer obtains control of the goods, they are fulfillment activities.
- If the shipping and handling occur after a customer obtains control of the goods, an entity makes a policy election to treat these costs as:
  - fulfillment activities, in which case the entity accrues the costs of these activities and recognizes revenue for the full amount of the goods when control of the goods transfers to the customer – thereby achieving matching of the expense and revenue; or
  - a performance obligation, in which case the entity allocates a portion of the transaction price to the shipping and handling. Revenue allocated to the goods is recognized when control of the goods transfers to the customer, and revenue for the shipping is recognized as the shipping and handling performance obligation is satisfied. The related costs are generally expensed as incurred.

Regardless of which policy an entity uses, when the entity concludes that control transfers to the customer before the risks and rewards of ownership have been transferred, it may experience a change in practice if it currently applies synthetic FOB destination accounting.
Series of distinct goods

Manufacturers in the scope of the series guidance may see an acceleration in the timing of revenue, cost and margin recognition.

Under the new standard, if products promised in a manufacturing contract are distinct, substantially the same, meet the over-time criteria (see Step 5: Recognize revenue) and have the same pattern of transfer, those products are in the scope of the series guidance; application of the series guidance is not optional. This means that they are a single performance obligation – i.e. a single unit of account.

Current US GAAP doesn’t have a concept similar to the series guidance.

Example

Manufacturer X agrees to construct five identical customized parts for Customer Y over the next 12 months. The following facts are relevant.

— The unit price is $100 – i.e. total contract price is $500.
— The total expected costs for all five parts are $400, resulting in expected margin of $100, or 20%.
— There is a learning curve in connection with the production of the first part, with the cost being $96; the cost for each of the remaining four parts is $76.
— Each part has no alternative use and Manufacturer X has an enforceable right to payment for performance to date.

Manufacturer X concludes that the contract does not include a significant integration service such that the five customized parts do not represent a single, combined output of the contract; instead, each part is considered a distinct good. However, because Manufacturer X concludes that the parts will transfer to Customer Y over time and the same method would be used to measure progress towards satisfaction of each part, the series guidance applies and the five parts form a single performance obligation.

Manufacturer X uses the cost-to-cost method as the measure of progress to recognize revenue. Therefore, as illustrated in the table, revenue and gross margin are recognized earlier than under the current units-based method because of the effect of the learning curve and the use of an input measure to reflect the pattern of transfer of control of the products to the customer.

<table>
<thead>
<tr>
<th></th>
<th>Current GAAP: Units-based method</th>
<th>New standard: Cost-to-cost method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First part</td>
<td>Each remaining part</td>
</tr>
<tr>
<td>Revenue</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>Cost</td>
<td>$96</td>
<td>$76</td>
</tr>
<tr>
<td>Gross margin ($)</td>
<td>$4</td>
<td>$24</td>
</tr>
<tr>
<td>Gross margin (%)</td>
<td>4%</td>
<td>24%</td>
</tr>
</tbody>
</table>
Pre-contract costs

The timing for recognizing cost and revenue related to activities prior to existence of a contract may change.

Often manufacturers will incur pre-contract costs or carry out activities before a contract exists (e.g. assembling some parts to manufacture highly customized products before a purchase order is received) in order to meet anticipated or forecasted demand from customers.

Revenue – If the criteria in Step 1: Identify the contract have not been met, any consideration received from the customer is generally recognized as a deposit (liability). When the criteria for contract existence under the new standard are met and performance obligation(s) in that contract meet the over-time transfer of control criteria, revenue for the portion of performance obligation(s) satisfied through the pre-contract activities is recognized on a cumulative catch-up basis on the date it is determined a contract exists.

Costs – If the pre-contract costs incurred in fulfilling a contract (or anticipated contract) with a customer are not in the scope of other guidance – e.g. inventory, intangibles, research and development, or property, plant and equipment – then an entity recognizes an asset only if the fulfillment costs:

— relate directly to an existing contract or specific anticipated contract;
— generate or enhance resources that will be used to satisfy performance obligation in the future; and
— expect to be recovered.

Pre-production activities

Pre-production activities may be a separate performance obligation.

Manufacturers may incur pre-production costs relating to long-term supply arrangements with their customers. Current US GAAP requires the manufacturer to expense design and development costs relating to:

— products that will be sold under long-term supply arrangements; or
— molds, dies and other tools ("tooling") that it will not own, but that it will use to manufacture products under those arrangements.

However, capitalization of such costs is required if the manufacturer has a:

— legally enforceable contractual guarantee for reimbursement that can be objectively measured and verified; or
— noncancellable right to use the tooling during the supply arrangement.

Under the new standard, a manufacturer evaluates whether tooling and other pre-production activities will result in the transfer of control of a good or service for which it is entitled to consideration. For example, in a situation where the manufacturer does not have a noncancellable right to use the tooling (because both title and control transfer to the customer), and has a contractual guarantee of reimbursement from the customer, it may be reasonable to conclude that tooling is a separate performance obligation. The manufacturer will consider the guidance in Subtopic 340-10 to account for the related costs. Costs within the scope of Subtopic 340-10 will not be eligible for capitalization as fulfillment costs under Subtopic 340-40.

Manufacturers that apply the cost guidance in Subtopic 340-10 should monitor FASB activities as it intends to perform outreach with companies and auditors to determine whether additional changes to the cost guidance is necessary. KPMG’s Defining Issues No. 16-33 elaborates on the decision and impact of the FASB retaining current guidance on pre-production costs related to long-term supply arrangements.
Rebates and volume discounts

Most retrospective volume rebates will have similar accounting to today. However, revenue may be deferred for certain discounts on future purchases.

Manufacturers may provide incentives to their customers through volume rebates or discounts. These incentives can take different forms. For example, some agreements provide a discount or rebate that applies to all purchases made under the agreement – i.e. the discount or rebate applies on a retrospective basis once a volume threshold is met. In other cases, the discounted purchase price may only apply to future purchases once a minimum volume threshold has been met. These different structures of discounts and rebates may result in different accounting under the new standard as illustrated below.

Retrospective rebates or discounts

If a rebate or discount applies retrospectively to all purchases under the contract once the threshold is achieved, then the rebate or discount usually represents variable consideration. In that case, the entity:

— estimates the volume to be purchased and the resulting discount in determining the transaction price from inception of the contract; and
— updates that estimate throughout the term of the contract, recognizing a reduction in revenue based on the estimated transaction price when control of the underlying goods and services in the contract transfers to the customer.

An entity includes variable consideration in the transaction price to the extent that it is probable that a significant reversal of cumulative revenue will not occur when the volume uncertainty is resolved (constraint on variable consideration).

This accounting under the new standard may be different from current US GAAP in certain circumstances because of the constraint on variable consideration guidance. For example, under current US GAAP, the maximum discount available is used as the estimated discount if the entity is unable to make a reasonable estimate. The new standard does not default to the maximum discount but requires an entity to evaluate the probability and significance of a reversal of revenue to determine the estimated discount.

Future discounts

A manufacturer may grant the customer an option to acquire additional goods or services at a discount. That option is a performance obligation under the contract if it provides a material right that the customer would not receive without entering into that contract. Therefore, if a tiered pricing structure provides for discounts on future purchases, the manufacturer evaluates the arrangement to determine whether the arrangement conveys a material right to the customer.

A material right exists if:

— the discount provides the customer with an option to purchase additional goods or services at a price that does not reflect their stand-alone selling prices; and
— those discounts are only earned as a result of the customer entering into the arrangement.

If a material right exists, it is accounted for as a separate performance obligation; this results in revenue being allocated to the option and deferred until the option is exercised or expires.

The allocated amount of revenue deferred is based on the relative stand-alone selling price of the customer’s option to acquire additional goods or services. If that price is not directly observable then the manufacturer will need to estimate it. This estimate reflects the discount that the customer would obtain when exercising the option, adjusted for:

— any discount that the customer would receive without exercising the option; and
— the likelihood that the option will be exercised.

If the goods or services that the customer has a material right to acquire are:

— similar to the original goods or services in the contract; and
— are provided in accordance with the terms of the original contract,
then a manufacturer, as a practical alternative to estimating the stand-alone selling price of the option, may allocate the transaction price to the optional goods or services by reference to the goods or services expected to be provided and the corresponding expected consideration.
Example

Manufacturer M enters into a contract with Customer C to manufacture and deliver a minimum of 100 products during the next three years with an option for Customer C to purchase identical additional product in excess of 100 units. The contract calls for a per unit sales price of $1,000 for the first 100 products manufactured and a per unit sales price of $800 thereafter (i.e. a 20% discount). Manufacturer M’s standard selling price for this product is $1,000.

Manufacturer M concludes that the discount for products sold after the initial 100 provides a material right that Customer C would not receive without entering into the original sales contract. Therefore, the discount is a separate performance obligation.

Manufacturer M estimates that Customer C most likely will purchase 200 products during the life of the contract.

Manufacturer M estimates the price of the option, using the ‘practical alternative’, as:

- expected transaction price of $180,000 = ($1,000 per unit sales price x first 100 sold) + ($800 per unit sales price x 100 anticipated incremental sales in excess of 100 minimum); and
- per product transaction price of $900 = $180,000 / 200 products anticipated to be sold.

During the three-year contract period Customer C:

- initially purchases 100; and
- subsequently purchases another 50 products.

Manufacturer M after the initial 150 purchases and through contract expiration expected Customer C to purchase another 50 products – but Customer C didn’t make any additional purchases (i.e. Manufacturer M does not record any breakage for unused discount prior to the expiration of the contract).

Manufacturer M records the following journal entries.

<table>
<thead>
<tr>
<th>Manufacturer M records the following journal entries.</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td></td>
<td>$100,000</td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
<td>$90,000</td>
</tr>
<tr>
<td>Contract liability</td>
<td></td>
<td>$10,000</td>
</tr>
<tr>
<td><strong>To recognize initial sale of 100 products minimum purchase order and discount performance obligation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td>$40,000$1</td>
</tr>
<tr>
<td>Contract liability</td>
<td></td>
<td>$5,000$2</td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
<td>$45,000</td>
</tr>
<tr>
<td><strong>To recognize subsequent 50 purchases (i.e. in excess of 100 products)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract liability</td>
<td></td>
<td>$5,000$3</td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
<td>$5,000</td>
</tr>
<tr>
<td><strong>To recognize expiration of discount performance obligation</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Discounted sale price for additional products purchased – 50 products x $800.
2. Partial satisfaction of performance obligation – $10,000 x (50 incremental product purchases / 100 incremental product purchase expected).
3. Remaining (unused) discount performance obligation at contract expiration ($10,000 - $5,000).
A material right may not exist if the discount provided to the customer is similar to that provided to other customers in the same class regardless of whether they had qualifying prior purchases. For example, assume Customer C receives the discount based on its volume purchases in the prior year but Manufacturer M provides that same discount to new customers of a similar size that were not required to make purchases. The fact that Manufacturer M does not require customers in a similar class to earn the discount indicates that the discounted pricing may not represent a material right.

If a material right does not exist, there is no accounting for the future option and the transactions completed before the volume threshold is met are recognized at the contract price (i.e. $1,000 per unit in the example on page 8), and purchases after the threshold has been met are accounted for at the discounted price (i.e. $800 per unit in the example on page 8).

Other

In addition to rebates and volume discounts, a manufacturer’s transaction price may be affected by awards, incentive payments and/or claims; all of these may be contingent on the occurrence or non-occurrence of future events or activities (e.g. delivering the products on time). These other effects will usually result in variable consideration, as opposed to being identified and accounted for as separate performance obligations, and are estimated (subject to the constraint on variable consideration) and included in the transaction price.

Costs to obtain a contract

Manufacturers will no longer have the choice to expense commissions as incurred if certain criteria are met.

Under current SEC guidance, manufacturers can elect to capitalize direct and incremental contract acquisition costs (e.g. sales commissions) in certain circumstances, although many manufacturers expense the costs as incurred.

Under the new standard, a manufacturer is required to capitalize costs to obtain a contract (e.g. sales commissions) if those costs are only incurred as a result of obtaining a contract and the entity expects to recover them – unless it elects the practical expedient for costs with amortization periods of one year or less.

Similar to the determination for other long-lived assets, the evaluation of the term over which the capitalized asset should be amortized (i.e. whether over a period greater than a year) should be based on whether the probable future economic benefits obtained or controlled by the entity for the initial asset are commensurate with the initial contact term (e.g. a year) or extend beyond the initial term (i.e. whether over a period greater than a year). The practical expedient may not be available for longer term contracts if the probable future economic benefits of the asset are expected to be greater than a year. Accordingly, capitalization and amortization may be required for incremental costs to obtain a contract for these longer term contracts.

The requirement to capitalize the costs of obtaining a contract will be a change for manufacturers that currently expense those costs. It may also be complex to apply, especially for manufacturers with many contracts and a variety of contract terms and commission and incentive structures. Those manufacturers that have not previously tracked the costs of acquiring a contract, and have expensed them as they were incurred, may find it difficult to determine which costs to capitalize, both for the transition amounts on adoption (regardless of the transition method used) and in the ongoing application of the new standard.

A manufacturer that currently capitalizes the costs to obtain a contract will need to assess whether its current capitalization policy is consistent with the new requirements. For example, a manufacturer that currently capitalizes incremental bid costs will need to identify those costs that are incurred because it obtained the contract, and exclude bid costs that are incurred irrespective of whether the contract is obtained. Likewise, an entity that capitalizes both incremental and allocable costs (e.g. employee costs) of obtaining a contract will need to revise its policy to capitalize only the incremental costs of obtaining a contract.
Significant financing component

The amount of revenue recognized for long-term contracts may be affected by a significant financing component.

Manufacturers with long-term contracts need to evaluate whether the contracts include a significant financing component. If the period between performance and payment for that performance (whether advance payments or payments in arrears) is one year or more, significant financing may exist between the parties. The financing component may be explicitly identified in the contract or may be implied by the contractual payment terms.

A contract does not have a significant financing component if the difference between the amount of promised consideration and the cash selling price of the promised goods or services arises for reasons other than the provision of financing. For example, a customer may withhold an amount of consideration that is payable upon successful completion of the contract or the achievement of a specified milestone. The primary purpose of these payments may be to provide the customer with assurance that the entity will perform its obligation under the contract, rather than provide financing to the customer.

Manufacturers will be required to adjust the promised amount of consideration for the time value of money when a contract contains a significant financing component. For advance payments in particular, the requirement to account for a significant financing component under the new standard is a change from current practice.

**Advance payments**

Under current US GAAP, advance payments from customers that do not require repayment in the future, but that will instead be applied to the purchase price of the goods or services, are excluded from the requirement to impute interest. This is because the liability – i.e. deferred revenue – is not a financial liability.

The requirements under the new standard are a change from current practice and may particularly affect contracts in which payment is received significantly earlier than the transfer of control of goods or services to the customer. For example, it may affect manufacturers with long-term contracts. When the financing component is significant to a contract, an entity increases the contract liability and recognizes a corresponding interest expense for customer payments received before the delivery of the good or service. When it satisfies its performance obligation, the manufacturer recognizes more revenue than the cash received from the customer, because the contract liability has been increased by the interest expense that is accreted. Accordingly, this accounting will result in an increase in revenue and an increase in interest expense compared with current US GAAP.

**Payments in arrears**

Under current US GAAP, payments in arrears (i.e. extended payment terms) may result in a conclusion that revenue is not fixed or determinable, which precludes revenue recognition. In those cases, entities default to a due-and-payable revenue model and do not account for a financing element.

Under the new standard, the transaction price is estimated and a separate evaluation is performed to determine whether the payment terms provide financing to the customer as long as collectibility of the contract price is probable. As a result, the accounting for financing in arrangements where the customer pays in arrears will likely arise more frequently than in current practice. Doing so will result in a decrease in revenue and an increase in interest income.
Warranties

Warranty accounting for most standard assurance warranties won’t change.

But if an entity provides a service in addition to assurance even if the service is not sold separately, a change in the accounting and amount of revenue recognized for the product may occur.

Manufacturers often provide product warranties that assure customers that the products comply with agreed-upon specifications. In some cases, manufacturers may also offer more extensive warranties.

Under current US GAAP, product warranties are typically accounted for as a cost accrual with no effect on revenue recognition unless the entity provides the warranty through a separately priced arrangement. Revenue for separately priced warranties is measured at the contract amount and recognized over the contract period under current US GAAP.

The accounting for warranties under the new standard depends on the type of warranty being provided.

- **Assurance-type** warranties provide a customer with assurance that the related product will function as intended and complies with any agreed-upon specifications.

- **Service-type** warranties provide a customer with a service in addition to the assurance that the product complies with agreed-upon specifications.

Manufacturers should consider the nature of the tasks that are promised, the length of the warranty coverage period, whether the customer can decide to buy or not to buy the warranty, and whether the warranty is required by law to conclude on whether an assurance-type or service-type warranty is being provided to the customer.

The new standard retains the current US GAAP cost accrual model for assurance-type warranties. Therefore, if the warranty cannot be purchased separately and only provides assurance that the product complies with agreed-upon specifications, the accounting for the promised warranty will not change under the new standard.

Service-type warranties are a separate performance obligation under the new standard and require revenue to be allocated to them on a relative stand-alone selling price basis.

- If a customer has the option to purchase a warranty separately (for example, because the warranty is priced or negotiated separately), the manufacturer would account for the warranty as a separate performance obligation. This is because the manufacturer promises to provide a service to the customer in addition to the product.

  - If the customer does not have the option to purchase the warranty separately, but the manufacturer provides a service to the customer in addition to warranting that the product complies with the agreed-upon specifications, this additional service is also a separate performance obligation.

The new standard may result in changes for some manufacturers because:

- the allocated revenue amount may differ from the separately stated contract amount that is used under current US GAAP; or

- the allocation and deferral of revenue is required for a service-type warranty when the warranty is not separately priced.

In addition, if a manufacturer provides a warranty that includes both an assurance element and a service element and cannot reasonably account for them separately, it accounts for both of the warranties together as a single performance obligation (i.e. a service-type warranty). This may result in revenue being deferred either in a different amount or more frequently than under current practice.

Manufacturers that experience losses or thin margins when providing service-type warranties will need to be mindful of how the new standard interacts with current loss accrual guidance. Current loss accrual guidance applies only to separately priced warranties. Under the new standard, when an entity has a separate performance obligation for a service-type warranty that is not separately priced, the loss accrual guidance does not apply. Therefore, manufacturers may have different accounting for embedded losses on a service-type warranty depending on whether it is priced separately. Also, the loss recorded under current US GAAP today may change even for those warranties that are separately priced; this is because the loss is based on the allocated relative stand-alone selling price under the arrangement, which may not be the same as the separately stated price for the warranty.
Bill-and-hold arrangements

An explicit customer request and a specified delivery schedule are no longer required to recognize revenue under a bill-and-hold arrangement.

Under current SEC guidance on bill-and-hold arrangements, revenue is not recognized until all bill-and-hold criteria are met. The new standard focuses on when control of the good transfers to the customer.

The criteria for bill-and-hold arrangements under the new standard differ in two key respects from current SEC guidance:

— The bill-and-hold arrangement is not required to be at the customer’s explicit request. The new standard requires the reason for the bill-and-hold arrangement to be substantive. An understanding of the business reasons is important.

— The entity does not need a specified delivery schedule to meet the bill-and-hold criteria. However, the lack of a planned or estimated delivery date could indicate that the contract does not exist since the enforceable rights and obligation between the parties are not clear (see Step 1: Identify the contract). If a delivery schedule does not exist, it may be important that the entity receives appropriate consideration to hold the asset indefinitely to conclude that the parties are committed to their obligations and that a contract exists.

Under the new standard, an obligation to warehouse the goods after control has transferred to the customer may be a separate performance obligation and revenue would be allocated and recognized as the warehousing service is provided.

Contract and modification

The previous revenue recognition guidance did not include a general framework for accounting for contract modifications – that has now changed.

MSA versus purchase order

Manufacturers often enter into framework arrangements like master supplier agreements (MSA) with customers, and subsequently receive purchase orders (POs) from customers on a periodic basis. An MSA might not meet the definition of a contract in the new standard; this is because the MSA itself might not obligate the customer to purchase a minimum or specified quantity of products from the manufacturer or have a substantive penalty for terminating the MSA. In these cases, until the manufacturer receives a PO with a fixed commitment for a quantity of products, a contract does not exist. In these situations, the PO in combination with the MSA will need to be evaluated to determine whether Step 1 criteria are met and a contract exists (see Step 1: Identify the contract).

Contract modification

Change orders are a common form of contract modification for manufacturers. There is currently guidance in US GAAP on contracts modifications for long-term construction- and production-type contracts. However, current revenue recognition guidance does not include a general framework for accounting for contract modifications. Current US GAAP on long-term construction- and production-type contracts includes guidance for unpriced change orders, contract options and additions, and claims. Unpriced changes orders are reflected in the accounting if recovery is probable and a claim is included in contract revenue if it is probable that the claim will result in additional contract revenue that can be reliably estimated. Under this guidance, modifications of long-term construction- and production-type contracts are generally accounted for on a cumulative catch-up basis – i.e. updating their measure of progress under the contract for the effect of the modification. Because contract modification guidance does not exist for arrangements other than long-term construction- and production-type contracts, there is diversity in practice for arrangements outside the scope of this guidance.

Under the new standard, all modifications are accounted for when they are approved using the same contract modification guidance. A contract modification is accounted for on a cumulative catch-up basis or prospectively depending upon the type of modification to the contract. If the contract modification does not promise additional distinct goods or services, the modification will generally be accounted for on a cumulative catch-up basis. If the contract modification adds additional distinct goods or services to the arrangement, the modification will generally be accounted for prospectively, with a reallocation of remaining revenue under the original contract if the additional goods or services are not priced at their stand-alone selling prices.
Applicable to all industries

Expanded disclosures

The new standard contains both qualitative and quantitative disclosure requirements for annual and interim periods. The objective of the disclosures is to provide sufficient information to enable users of the financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers.

Specifically, the new standard includes disclosure requirements for:
- disaggregation of revenue;
- contract balances, including changes during the period;
- performance obligations;
- significant judgments; and
- assets recognized to obtain or fulfill a contract, including changes during the period.

An entity should review these new disclosure requirements to evaluate whether data necessary to comply with the disclosure requirements are currently being captured and whether system modifications are needed to accumulate the data.

Internal controls necessary to ensure the completeness and accuracy of the new disclosures should be considered – especially if the required data was not previously collected, or was collected for purposes other than financial reporting.

Also, SEC guidance requires registrants to disclose the potential effects that recently issued accounting standards will have on their financial statements when adopted¹. The SEC expects the level and specificity of these transition disclosures to increase as registrants progress in their implementation plans. The SEC has also stated, when the effect is not known or reasonably estimated, that a registrant should describe its progress in implementing the new standard and the significant implementation matters that it still needs to address.

Transition

An entity can elect to adopt the new standard in a variety of ways, including retrospectively with or without optional practical expedients, or from the beginning of the year of initial application with no restatement of comparative periods (cumulative effect method).

Entities that elect the cumulative effect method, are required to disclose the changes between the reported results of the new standard and those that would have been reported under current US GAAP in the period of adoption.

For transition purposes, the new standard introduces a new term – completed contract. A completed contract is a contract for which an entity has recognized all or substantially all of the revenue under current US GAAP as of the date of adoption of the new standard. The concept of a completed contract is used when applying:
- certain practical expedients available during transition under the retrospective method; and
- the cumulative effect method coupled with the election to initially apply the guidance only to those contracts that are not complete.

This will require careful analysis particularly where there is trailing revenue after delivery has occurred (e.g. revenue was not fixed or determinable, collectibility was not reasonably assured, royalty arrangements). In those circumstances, the contract would not be considered complete if substantially all of the revenue had not been recognized before adoption. Applying the standard to these types of contracts at transition may result in revenue being pulled into the opening retained earnings adjustment.

Entities should consider the potential complexities involved with calculating the opening retained earnings adjustment and the recast of comparative periods (if any) when planning their implementation. It may be prudent for entities to perform transition calculations before the adoption date to ensure all potential complexities are identified.

Effective dates

<table>
<thead>
<tr>
<th>Type of entity</th>
<th>Annual reporting periods after</th>
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<tr>
<td>Public business entities and not-for-profit entities that are conduit bond obligators</td>
<td>December 15, 2017 including interim reporting periods within that reporting period. Early adoption permitted for annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period.</td>
</tr>
<tr>
<td>All other US GAAP entities, including SEC registrants that are Emerging Growth Companies</td>
<td>December 15, 2018 and interim reporting periods within annual reporting periods beginning after December 15, 2019. Early adoption permitted for annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period or interim reporting periods within the annual period subsequent to the initial application.</td>
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¹ Staff Accounting Bulletin Topic 11.M.
Some basic reminders

Scope

The guidance applies to all contracts with customers unless the customer contract is specifically within the scope of other guidance – e.g. Topic 944 (insurance), Topic 460 (guarantees).

The new standard applies to contracts to deliver goods or services to a customer. A ‘customer’ is a party that has contracted with an entity to obtain goods or services that are an output of the entity’s ordinary activities in exchange for consideration.

The new standard will be applied to part of a contract when only some elements are in the scope of other guidance.

Step 1: Identify the contract

Contracts can be written, oral or implied by an entity’s customary business practices, but must be enforceable by law. This may require legal analysis on a jurisdictional level to determine when a contract exists and the terms of that contract’s enforceability.

A contract with a customer is in the scope of the new standard when the contract is legally enforceable and all of the following criteria are met:

— the contract has commercial substance;
— rights to goods or services can be identified;
— payment terms can be identified;
— the consideration the entity expects to be entitled to is probable of collection; and
— the contract is approved and the parties are committed to their obligations.

If the criteria are not met, any consideration received from the customer is generally recognized as a deposit (liability).

Step 2: Identify the performance obligations

Performance obligations do not have to be legally enforceable; they exist if the customer has a reasonable expectation that the good or service will be provided. A promise can be implied by customary business practices, policies or statements.

Performance obligations are the unit of account under the new standard and generally represent the distinct goods or services that are promised to the customer.

Promises to the customer are separated into performance obligations, and are accounted for separately if they are both (1) capable of being distinct and (2) distinct in the context of the contract.

An exception exists if the performance obligations represent a series of distinct goods or services that are substantially the same and that have the same pattern of transfer to the customer over time. A series is accounted for as a single performance obligation.
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 goods or services to a customer, excluding amounts collected on behalf of third parties – e.g. some sales taxes. This consideration can include fixed and variable amounts, and is determined at inception of the contract and updated each reporting period for any changes in circumstances.

The transaction price determination also considers:

- **Variable consideration**, which is estimated at contract inception and is updated at each reporting date for any changes in circumstances. The amount of estimated variable consideration included in the transaction price is constrained to the amount for which it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty is resolved.

- **Noncash consideration** received from a customer is measured at fair value at contract inception.

- **Consideration payable to a customer** represents a reduction of the transaction price unless it is a payment for distinct goods or services it receives from the customer.

- **Significant financing components** may exist in a contract when payment is received significantly before or after the transfer of goods or services. This could result in an adjustment to the transaction price to impute interest income/expense.

Step 4: Allocate the transaction price

The transaction price is allocated at contract inception to each performance obligation to depict the amount of consideration to which an entity expects to be entitled in exchange for transferring the promised goods or services to the customer.

An entity generally allocates the transaction price to each performance obligation in proportion to its stand-alone selling price. However, when specified criteria are met, a discount or variable consideration is allocated to one or more, but not all, performance obligations.

The stand-alone selling price is the price at which an entity would sell a promised good or service separately to a customer. Observable stand-alone prices are used when they are available. If not available, an entity is required to estimate the price using other techniques – even if the entity never sells the performance obligation separately.
### Step 5: Recognize revenue

An entity must first determine whether a performance obligation meets the criteria to recognize revenue over time.

If none of the over-time criteria are met, revenue for the performance obligation is recognized at the point in time that the customer obtains control of the goods or services.

Control is the ability to direct the use of, and obtain substantially all of the remaining benefits from the goods or services – or prevent others from doing so.

An entity recognizes revenue when it satisfies its obligation by transferring control of the good or service to the customer.

A performance obligation is satisfied **over time** if one of the following criteria are met:
- the customer simultaneously receives and consumes the benefits as the entity performs;
- the entity’s performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or
- 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.

If control transfers **over time**, an entity selects a method to measure progress that is consistent with the objective of depicting its performance.

If control transfers at a **point in time**, the following are some indicators that an entity considers to determine when control has passed. The customer has:
- a present obligation to pay;
- physical possession;
- legal title;
- risks and rewards or ownership; and
- accepted the asset.

### Customer options

Customer options may be accounted for as performance obligations, resulting in more revenue deferral than under current GAAP.

Revenue is allocated to a customer option to acquire additional goods or services, and is deferred until (1) those future goods or services are transferred or (2) the option expires when it represents a material right. A material right exists if the customer is only able to obtain the option by entering into the sale agreement and the option provides the customer with the ability to obtain the additional goods or services at a price below stand-alone selling prices.

### Warranties

Warranties do not have to be separately priced to be accounted for as performance obligations.

Assurance-type warranties will generally continue to be accounted for under existing guidance – i.e. Topic 450 (contingencies). However, a warranty is accounted for as a performance obligation if it includes a service beyond assuring that the good complies with agreed-upon specifications. This could require some warranties to be separated between a service element (deferral of revenue which is then recognized as the services are provided) and an assurance element (cost accrual at the time the good is transferred).
## Principal vs. agent

The new standard changes the guidance used to evaluate whether an entity is a principal or an agent.

Credit risk is no longer an indicator that an entity is a principal.

An entity identifies each specified good or service to be transferred to the customer, and determines whether it is acting as a principal or agent for each one. In a contract to transfer multiple goods or services, an entity may be a principal for some goods and services and an agent for others.

An entity is a principal if it controls the specified good or service that is promised to the customer before it is transferred to the customer.

Indicators that an entity has obtained control of a good or service before it is transferred to the customer are having primary responsibility to provide specified goods or services, assuming inventory risk, and having discretion to establish prices for the specified goods or services.

## Contract modifications

A general accounting framework replaces specific contract modification guidance for long-term construction- and production-type contracts. However, outside of these arrangements, an entity will find more guidance in the new standard than under current GAAP.

The new standard requires an entity to account for modifications either on a cumulative catch-up basis (when the additional goods or services are not distinct) or a prospective basis (when the additional goods or services are distinct).

If any additional distinct goods or services are not priced at their stand-alone selling prices, the remaining transaction price is required to be reallocated to all unsatisfied performance obligations, including those from the original contract.

## Contract costs

More costs are expected to be capitalized under the new standard.

An entity cannot elect to expense or capitalize. Capitalization is required when the criteria are met.

The new standard provides guidance on the following costs related to a contract with a customer that are in the scope of the new standard:

- incremental costs to obtain a contract; and
- costs incurred in fulfilling a contract that are not in the scope of other guidance.

Incremental costs to obtain a contract with a customer (e.g. sales commissions) are required to be capitalized if an entity expects to recover those costs – unless the amortization period, which may include anticipated contracts or renewals, is less than 12 months.

Fulfillment costs that are not in the scope of other guidance – e.g. inventory, intangibles, or property, plant, and equipment – are capitalized if the fulfillment costs:

- relate directly to an existing contract or specific anticipated contract;
- generate or enhance resources that will be used to satisfy performance obligations in the future; and
- are expected to be recovered.

An entity amortizes the assets recognized for the costs to obtain and fulfill a contract on a systematic basis, consistent with the pattern of transfer of the good or service to which the asset relates.
The impact on your organization

Implementation of the new standard is not just an accounting exercise.

New revenue recognition standard and corresponding accounting changes
- Impact of new revenue recognition standard and mapping to new accounting requirements
- New accounting policies – historical results and transition
- Reporting differences and disclosures
- Tax reporting/planning

Financial and operational process changes
- Revenue process allocation and management
- Budget and management reporting
- Communication with financial markets
- Covenant compliance
- Opportunity to rethink business practices
- Coordination with other strategic initiatives

Revenue recognition automation and ERP upgrades
- Automation and customization of ERP environment
- Impact on ERP systems
- General ledger, sub-ledgers and reporting packages
- Peripheral revenue systems and interfaces

Governance and change
- Governance organization and changes
- Impact on internal resources
- Project management
- Training (accounting, sales, etc.)
- Revenue change management team
- Multi-national locations

As noted in the chart, the new standard could have far-reaching effects. The standard may not only change the amount and timing of revenue, but potentially requires changes in the core systems and processes used to account for revenue and certain costs. Entities may need to design and implement new internal controls or modify existing controls to address risk points resulting from new processes, judgments, estimates and disclosures. The implementation of the new standard will involve a diverse group of parties (e.g. Tax, IT, Legal, Financial Planning, Investor Relations, etc.) and entities should have a governance structure in place to identify and manage the required change. For more information about implementation challenges and considerations, see chapter 14 of KPMG’s Revenue: Issues In-Depth.
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