Revenue recognition
The standard is final – A comprehensive look at the new revenue model

Automotive industry supplement

At a glance
On May 28, the FASB and IASB issued their long-awaited converged standard on revenue recognition. Almost all entities will be affected to some extent by the significant increase in required disclosures. But the changes extend beyond disclosures, and the effect on entities will vary depending on industry and current accounting practices.

In depth US2014-01 is a comprehensive analysis of the new standard. This supplement highlights some of the areas that could create the most significant challenges for entities in the Automotive sector as they transition to the new standard. Other supplements present the impact of the new standard in other industrial sectors, including Industrial Products, Aerospace and Defense, and Engineering and Construction.

Overview
Entities in the automotive industry, including suppliers, dealers, original equipment manufacturers (OEMs) and their finance affiliates, will be affected by the new revenue standard, which replaces all current U.S. GAAP and IFRS revenue recognition guidance. Key areas of interest to companies in the automotive industry include the accounting for pre-production activities (for example, pre-production design and tooling arrangements), marketing incentives (for example, cash rebates), volume rebates, repurchase options, product warranties, contract costs, and lease financing arrangements.

This automotive industry supplement discusses the areas where the new standard is expected to have the greatest impact or be of particular interest to activities in the automotive industry. References to the "new model," "new guidance," and "new standard" throughout this document refer to the final standard unless otherwise indicated.
Defining the contract

The new standard applies only to contracts with customers. A contract is an agreement between two or more parties that creates enforceable rights and obligations. A contract does not exist if both parties have the unilateral right to terminate a wholly unperformed contract without penalty.

Entities need to determine whether they should account for two or more contracts with the same customer together. Combining contracts, when appropriate, helps to ensure that the unit of accounting is properly identified, and the model is properly applied. For example, automotive suppliers often incur costs related to tooling prior to production of automotive parts. In some cases, the tooling is built by the supplier for sale to the OEM (that is, the tooling is or will be owned by the OEM). In others, the tooling will belong to the supplier. There is often a separate contract for both the construction of the tooling and the follow-on production output.

Contract modifications are common in the automotive industry and come in a variety of forms, including changes in the amount of goods to be transferred or previously agreed pricing. Contract modifications might need to be accounted for as a new contract, or combined and accounted for together with the existing contract.

It is not uncommon, for example, for an entity to receive price concessions on existing contracts in connection with the negotiation of new contracts. Entities need to evaluate whether a price concession is a modification of a previous contract or if it relates to a new contract. The entity might need to account for the price concession as part of a new contract and recognize the associated revenue as the performance obligations in the new contract are satisfied, as illustrated in Example 3.

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<tr>
<th>New model</th>
<th>Current U.S. GAAP</th>
<th>Current IFRS</th>
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<tbody>
<tr>
<td><strong>Combining contracts</strong></td>
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<tr>
<td>Two or more contracts (including contracts with parties related to the customer) should be combined and accounted for as one contract if the contracts are entered into at or near the same time and:</td>
<td>Combining contracts that are not in the scope of certain industry-specific guidance (for example, construction accounting) is required if they are with the same or related entities and are negotiated at the same time.</td>
<td>Combining contracts that are not in the scope of certain industry-specific guidance (for example, construction accounting) is required when two or more transactions are linked and combination is necessary to reflect the commercial (that is, economic) substance of the transactions.</td>
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<td>• the contracts are negotiated with a single commercial objective;</td>
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<td>• the amount of consideration in one contract depends on the price or performance of the other contract; or</td>
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<tr>
<td>• the goods or services promised are a single performance obligation.</td>
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<tr>
<td><strong>Contract modifications</strong></td>
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<tr>
<td>A contract modification is accounted for as a separate contract if:</td>
<td>There is no clear guidance on accounting for contract modifications within the non-industry-specific revenue guidance. Many entities account for contract modifications prospectively unless the contract modification is explicitly tied to prior performance.</td>
<td>There is no clear guidance on accounting for contract modifications. Many entities account for contract modifications prospectively unless the contract modification is explicitly tied to prior performance.</td>
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<tr>
<td>• the modification promises distinct goods or services; and</td>
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<tr>
<td>• the price of the contract increases by an amount of consideration that reflects the standalone selling price of the additional promised goods or services.</td>
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### New model

A modification that is not a separate contract is evaluated and accounted for either as:

- a termination of the original contract and the creation of a new contract if the goods or services are distinct from those transferred before the modification; or
- a cumulative adjustment to contract revenue if the remaining goods and services are not distinct and are part of a single performance obligation that is partially satisfied.

<table>
<thead>
<tr>
<th>Current U.S. GAAP</th>
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<tr>
<td>Non-refundable payments associated with accommodation arrangements (for example, price concessions) typically do not represent the culmination of a separate earnings process and should generally be deferred similar to the accounting for an upfront fee.</td>
<td>Non-refundable payments associated with accommodation arrangements (for example, price concessions) might need to be linked to another arrangement in order to understand their commercial effects and should generally be deferred similar to the accounting for an upfront fee.</td>
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</table>

### Potential impact:

Although identification of the contract is not expected to be difficult, this step could result in changes in the automotive industry. Certain arrangements (for example, contracts for pre-production activities related to contracts for long-term supply arrangements) might need to be considered together as a single contract for accounting purposes (see discussion below regarding separately accounting for two or more performance obligations and allocating the transaction price). Combining contracts could result in a change in the allocation and pattern of revenue recognition compared to today’s accounting.

Contract modifications will continue to require judgment to determine whether they should be accounted for as a separate contract. The new standard provides more prescriptive guidance than current U.S. GAAP or IFRS on determining whether a modification should be accounted for prospectively or as a cumulative catch-up adjustment.

### Example 1 - Combining contracts (separate contracts for tooling and production)

**Facts:** A supplier enters into two contracts in the same week with an OEM to (1) construct a tool for the OEM (the “Tool”) and (2) supply the OEM parts using the Tool. Title of the Tool transfers to the OEM prior to production of the parts under the supply contract, and the supplier will recover its cost for the Tool through a separate payment from the OEM equal to the supplier’s cost of the Tool. Payment for the Tool is due upon completion of the Tool and its approval by the OEM.

Should the supplier combine the contract to construct the Tool with the contract to produce the parts using the Tool?

**Discussion:** Given that the two contracts were entered into near the same time, the supplier will need to combine the two contracts if: (1) they were negotiated as a single package with a single commercial objective, (2) the consideration under one contract is dependent on the pricing of the other, or (3) the goods promised under the two contracts are a single performance obligation. In this example, it appears that the two contracts were negotiated with a single commercial objective (constructing the Tool and providing the related parts that will be produced using it) and that pricing is related (no profit margin on the Tool). The supplier should combine the two contracts based on the facts presented. Refer to Example 5 for a discussion of whether the Tool and production of the parts are a single performance obligation.
Example 2 - Contract modification (change in volume and price)

Facts: A supplier and an OEM have an existing take-or-pay contract for the sale of 1,000 parts at $10 each, with a total contract value of $10,000. The OEM purchases 600 parts but later concludes it needs not only the original 1,000 parts, but an additional 500 parts. The two parties negotiate a change in volume from 1,000 parts to 1,500 parts, and a prospective change in the price of all unproduced units from $10 to $7.50 (i.e., 900 remaining parts at $7.50 each). Assume the supplier does not offer similar discounts to other OEMs on similar parts sold.

Should the contract modification be combined with the existing contract or accounted for as a separate contract?

Discussion: The undelivered units are distinct (based on the definition of “distinct” in the new standard) from the delivered units and the pricing of the incremental units is not at current market prices (as implied by the above facts). Therefore, the modification should be accounted for as a termination of the existing contract and the creation of a new contract. The modification is accounted for prospectively in this fact pattern because the 600 delivered units are distinct from the 900 undelivered units. The supplier recognizes revenue of $7.50 per unit as control of each part transfers to the OEM. Revenue recorded for the first 600 parts sold is not adjusted.

Example 3 - Accommodation arrangement (customer payment to compensate for lower than expected volume)

Facts: A supplier and an OEM have an existing one year contract for the sale of parts at $10 each. The supplier and the OEM expected a volume of approximately 1,000 units when they entered into the contract, but the contract does not include a minimum volume commitment and the OEM is under no obligation to pay any additional consideration to the supplier. The OEM only purchased 600 parts and, at the end of the contract, the OEM agrees to pay the supplier $800 ((1,000 expected parts less 600 parts sold) x $2 (expected profit margin)) in the form of a non-refundable payment to make the supplier whole for the lower than expected volumes. At the same time, the supplier negotiates a new one year contract with the OEM for parts to be delivered in the following year at a per piece price of $10 based on the expectation that the OEM will purchase 900 parts over the second contract period.

How should the supplier account for the non-refundable payment received?

Discussion: While the new standard is not clear, the accounting for a contract modification provides reasonable guidance by analogy. If the $800 payment together with the $10 per unit price reflects the current market price for 900 units, the new arrangement is accounted for as a new contract. Otherwise, the arrangement is not a separate contract under the modification guidance because the second contract is not priced at market when considering the $800 payment on the first contract. The arrangement is nevertheless accounted for prospectively for the 900 parts under the new contract given that those parts are distinct from those sold under the original contract. Therefore, in this case, the non-refundable “make whole” payment will be allocated as part of the transaction price under the second contract. This means that revenue of $10.89 (($800 non-refundable payment + (900 parts x $10)) / 900 expected parts) is recognized as control of each part manufactured under the second contract is transferred to the OEM.

Example 4 - Contract modification (addition of a good or service)

Facts: An OEM sells vehicles to dealers with a promotion of three years of free maintenance on each vehicle to assist the dealer with selling the vehicles to the end customer. The promotion also applies to all vehicles on dealer lots for no additional charge to the dealer. The transaction with the dealer qualifies as a sale because control of the vehicle transfers to the dealer when the vehicle is delivered.

Should the addition of free maintenance be accounted for as a sales incentive or as a performance obligation? Is there a different treatment for vehicles currently in dealer inventory versus new sales to dealers after the incentive is announced?

Discussion: Free maintenance included as part of contracts for new sales to dealers is a performance obligation and a portion of the total transaction price should be allocated to it.

With respect to inventory on dealer lots, the answer depends on whether there was a valid expectation by the dealer that the OEM would offer such additional goods or services. The offer of free maintenance is a performance obligation if it were part of the original contract between the OEM and the dealer, whether the offer was explicit in the contract or
implied by the OEM’s prior business practices. This is a qualitative assessment based on the individual facts and circumstances, and different conclusions could be reached based on different fact patterns. For example, the OEM could conclude that the dealer did not have a reasonable expectation for certain items (such as free maintenance) if they are being offered for the first time, on a limited basis, and with no anticipation of repeating the offer.

### Accounting for separate performance obligations

The objective of identifying and separating performance obligations is to recognize revenue when the performance obligations are satisfied (that is, goods or services are transferred to the customer). An OEM’s agreement to transfer a vehicle and to provide free maintenance on the vehicle, for example, would likely require separation. Contracts must be evaluated to ensure that all performance obligations are identified.

It is common for an OEM to offer additional incentives (either cash rebates or free goods or services) after the sale of the vehicle to the dealer to assist with the sale to the end user. If the OEM includes a good or service in an arrangement with no change to the total price, the additional good or service may need to be accounted for as a separate performance obligation. The additional good or service could be explicit in the contract or implied based on past experience. If an additional good or service was added to a contract and was not explicitly or implicitly included in the original contract, the additional good or service would be accounted for as an operating expense.

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<tr>
<td>An entity should separately account for performance obligations if the good or service is distinct, or if a series of goods or services are homogenous and meet both of the following criteria:</td>
<td>Arrangements with multiple deliverables that are not in the scope of construction accounting are divided into separate units of accounting if the deliverables in the arrangement meet specific criteria. Separation is appropriate when the delivered item(s) has value to the customer on a stand-alone basis and the delivery of the undelivered item(s) is probable and substantially within the control of the vendor.</td>
<td>For transactions that contain separately identifiable components, it is necessary to apply the revenue recognition criteria to each separately identifiable component of a single transaction in order to reflect the transaction's substance. The customer's perspective is important in determining whether the transaction has a single element or multiple elements.</td>
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<tr>
<td>• Each distinct good or service in the series that the entity promises to transfer consecutively to the customer would be a performance obligation satisfied over time.</td>
<td>• A single method would be used to measure the entity’s progress toward satisfaction of the performance obligation to transfer each distinct good or service in the series to the customer.</td>
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<tr>
<td>• A single method would be used to measure the entity’s progress toward satisfaction of the performance obligation to transfer each distinct good or service in the series to the customer.</td>
<td>A good or service is distinct if both of the following criteria are met:</td>
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<tr>
<td>A good or service is distinct if both of the following criteria are met:</td>
<td>• 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.</td>
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<tr>
<td>• 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.</td>
<td>• The entity’s promise to transfer the good or service is separable from other promises in the contract.</td>
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**Potential impact:**

The indicators for separation of performance obligations will generally result in similar outcomes as produced by current guidance in U.S. GAAP and IFRS. However, entities in the automotive industry might, in certain cases, need to separately account for more performance obligations under the new standard. This may impact the timing of revenue recognition as compared to current accounting. An entity that concludes, for example, that separate contracts for the construction of a tool and for follow-on production parts should be combined, will likely need to separately account for the obligation to construct the tool and the obligation to produce the parts. The entity will then need to allocate the total transaction price using relative standalone selling price for each performance obligation. Warranties that contain service elements will also likely result in more performance obligations under the new standard as compared to today (refer to "Product warranties" section below).

All promises in a contract to provide goods or services, whether explicit or implicit, are performance obligations if they are distinct. This includes offers to provide goods or services that the customer can resell or provide to its customer. Promises to provide goods or services are different from promises to pay cash to the customer. The latter are not performance obligations and are accounted for as reductions of the transaction price, unless paid for a distinct good or service.

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**Example 5 - Identify the performance obligations (tooling and production contracts)**

**Facts:** A supplier enters into two contracts in the same week with an OEM to (1) construct a tool for the OEM (the “Tool”) and (2) supply the OEM parts using the Tool. Legal title of the Tool transfers to the OEM prior to production of the parts under the supply contract, and the supplier will recover its cost for the Tool through a separate payment from the OEM equal to the supplier’s cost of the Tool. Payment for the Tool is due upon completion of the Tool and its approval by the OEM. Assume that the contract to construct the Tool should be combined with the contract to produce the production parts. Further assume that the supplier is one of several suppliers with the ability to construct the tool and subsequently produce the production parts with existing machinery and equipment.

Does the combined contract have separate performance obligations?

**Discussion:** The answer depends on whether the Tool is distinct from the production parts manufactured by the supplier. The Tool is distinct in this fact pattern if (1) the customer (i.e., the OEM) can benefit from the Tool either on its own or together with other resources readily available, and (2) the Tool is separable from the production parts. The first condition is met because the Tool and parts are delivered at different times and the OEM can benefit from the Tool by taking it to another supplier and having that other supplier manufacture the production parts.

The Tool and subsequent production parts appear to be separable because (1) the development of the Tool is not integrated with the production of parts to produce a combined output, and (2) the Tool is not highly interrelated with the parts because the OEM can purchase or not purchase the parts without affecting the purchase of the Tool. The supplier recognizes revenue for each performance obligation when control of the respective good (the Tool and each individual part) is transferred to the OEM.

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**Example 6 - Identify the distinct performance obligations (free maintenance)**

**Facts:** An OEM sells a vehicle to a dealer with "free" vehicle maintenance for the first three years or 30,000 miles of ownership. The maintenance is performed by independent dealers of the OEM and the OEM compensates the dealer a pre-determined amount per event for performing the maintenance. In the same territory, an individual can purchase a similar maintenance service contract from a 3rd party.

Would the maintenance service be a separate performance obligation of the OEM?
**Discussion:** Granting a right (such as free maintenance) that the dealer can provide to its customer is likely to be a performance obligation of the OEM. An entity needs to determine whether the vehicle and maintenance services are distinct (that is, can the customer benefit from the vehicle apart from the maintenance) and if the two items separable. The customer can benefit from the vehicle separately from the maintenance since they are sold separately in the marketplace; therefore, the first condition is met. There is no integration of goods or services or customization, nor is the vehicle highly interrelated with the maintenance (the customer could purchase the vehicle without using the free maintenance); therefore, the second condition is also met. The vehicle and maintenance are distinct performance obligations of the OEM.

The free maintenance example above could also relate to other "free" items provided with the vehicle, such as satellite radio trials or roadside assistance. Different conclusions could be reached for each of these items based on the individual facts and circumstances.

**Determine and allocate the transaction price**

The transaction price is the consideration the entity expects to be entitled to in exchange for transferring promised goods or services to a customer. The transaction price is readily determinable in most contracts because the customer promises to pay a fixed amount of cash that is due when the entity transfers the promised goods or services (for example, when a supplier sells parts to an OEM for a specified price payable when the parts are delivered). Determining the transaction price in other contracts can be more complex, such as contracts with stated price increases or decreases over time or with volume pricing adjustments. The transaction price allocated to performance obligations in an arrangement is also affected by consideration payable to the customer (or to other parties that purchase the entity’s goods or services from the customer) and the time value of money.

OEMs and suppliers commonly offer various forms of customer incentives that reduce the transaction price. Two examples of incentives are cash rebates offered by OEMs and volume discounts offered by suppliers.

Revenue from both fixed and variable consideration is limited to the amount that is not subject to significant reversal if estimates of the amount of revenue the entity is expected to be entitled to changes. Only revenue that is “probable” under U.S. GAAP or “highly probable” under IFRS to be retained is considered to not be subject to significant reversal.

Once the amount of consideration is determined, it is allocated to the separate performance obligations in the contract. Entities might have to separately account for more performance obligations than today, so allocating the transaction price might be new to some automotive companies.

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<tr>
<th>New model</th>
<th>Current U.S. GAAP</th>
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<tr>
<td><strong>Consideration payable to a customer</strong></td>
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<tr>
<td>Amounts paid to a customer (for example, cash rebates) or to other parties that purchase the entity’s goods or services are: (a) a reduction of the transaction price; (b) a payment for distinct goods or services that the entity receives from the customer; or (c) a combination of (a) and (b).</td>
<td>Cash consideration given by a vendor to a customer is a reduction of revenue earned from the customer, unless the vendor receives an identifiable benefit (goods or services) from the customer and the fair value of such benefit can be reasonably estimated.</td>
<td>Cash consideration given by a vendor to a customer is a reduction of revenue earned from the customer, unless the vendor is purchasing goods or services from the customer.</td>
</tr>
<tr>
<td>If consideration paid is a reduction of the transaction price, management reduces the amount of revenue it recognizes at the later of when:</td>
<td>Sales incentives offered to customers are typically recorded as a reduction of revenue at the later of the date at which the related sale is recorded by the vendor and the date at which the sales incentive is offered.</td>
<td>Sales incentives offered to customers are typically recorded as a reduction of revenue at the later of the date at which the related sale is recorded by the vendor and the date at which the sales incentive is offered.</td>
</tr>
<tr>
<td>• the entity recognizes revenue for the transfer of the related goods or services to the customer; or</td>
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<tr>
<td>New model</td>
<td>Current U.S. GAAP</td>
<td>Current IFRS</td>
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<tr>
<td>• the entity pays or promises to pay the consideration to the customer (even if payment is conditional on a future event). The promise might be implied by the entity's customary business practice.</td>
<td>There is a hierarchy for determining the standalone selling price of a deliverable. This hierarchy requires selling price to be based on vendor-specific objective evidence (VSOE) if available, third-party evidence (TPE) if VSOE is not available, or estimated selling price if neither VSOE nor TPE is available. An entity must make its best estimate of selling price in a manner consistent with that used to determine the price to sell the deliverable on a standalone basis. No estimation methods are prescribed; however, examples include the use of cost plus a reasonable margin.</td>
<td>The transaction price should be allocated to the separate elements of the arrangement based on relative fair value when elements in a single contract are accounted for separately. The price that is regularly charged when an item is sold separately is the best evidence of the item’s fair value. At the same time, under certain circumstances, cost plus a reasonable margin can be used to estimate fair value. The use of the residual method and, under rare circumstances, the reverse residual method might be acceptable to allocate arrangement consideration.</td>
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### Allocating the transaction price

The transaction price (and any subsequent changes) is allocated to each performance obligation based on relative standalone selling price. The standalone selling price should be estimated if the actual selling price is not directly observable.

Possible estimation methods include cost plus a reasonable margin, market prices for similar goods/services or the residual approach when the selling price is highly variable.

An entity must allocate a discount or variable consideration entirely to one (or more) performance obligations if certain conditions are met.

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### Potential impact:

Variable consideration can take several forms. For example, variable consideration might be created by incentives that reduce the transaction price, such as volume discounts. The new standard requires incentives to be accounted for similar to current IFRS. Discounts expected to be taken by the customer over the contract period must be considered in estimating the transaction price using relevant experience. This might result in earlier recognition of discounts as compared to today’s U.S. GAAP. Subsequent changes in the estimate of variable consideration are accounted for as a change in the transaction price.

An entity can allocate a change in the estimate of variable consideration entirely to one or more distinct goods or services if certain conditions are met. These conditions require that the terms of the variable payment relate specifically to the entity's efforts to satisfy a specific obligation, and that the allocation is consistent with the allocation principle of the new standard. That is, each performance obligation is allocated an amount that depicts the amount of consideration to which the entity expects to be entitled to for satisfying that performance obligation. Little or no consideration allocated to a performance obligation would not meet the allocation objection in most situations.

Consideration paid to a customer (for example, cash rebates offered to end consumers by an OEM through its distribution network or below-market financing) is a reduction of the transaction price that reduces revenue. The promise to pay consideration might be explicit in the contract or implied based on an entity's customary business practice. Companies will need to review their current practices to determine if this guidance will affect their accounting for estimating cash rebates.

Time value of money could also affect the timing and classification of revenue recognized by OEMs as compared to today. Consider, for example, an extended vehicle warranty that the customer has the option to purchase separately, or a free maintenance program. The consideration for separately purchased warranties and free maintenance programs is typically received at the time of the vehicle sale to the end customer, yet the performance obligation is typically satisfied over a number of years. The entity will need to consider the reasons for requiring the upfront payment to determine if
there is a significant financing component in the arrangement. If a significant financing component exists, the transaction price allocated to the warranty or the free maintenance performance obligation should reflect the time value of money as interest income under the new standard. Entities that generate interest income in the ordinary course of business are not precluded from presenting interest income as revenue.

The sale price in a tooling arrangement between a supplier and an OEM is often structured either as separate payments at contractually stated amounts (typically equal to the supplier's cost of providing the tooling), or built into the sales price of the follow-on production parts. When tooling and parts contracts are combined, the new standard requires that the transaction price be allocated to the tooling and parts performance obligations based on their relative standalone selling prices, although the completion of the performance obligations should continue to be determined separately. In cases where tooling and parts contracts are combined, a portion of the total transaction price will need to be allocated to the tooling contract under the new model regardless of how the tooling arrangement is structured. As many tooling contracts are structured at cost, this will result in the allocation of some margin away from the parts sales to the tooling performance obligation.

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**Example 7 - Variable consideration (volume discount)**

**Facts:** A supplier enters into a contract to sell an undefined number of homogeneous components to an OEM. The price for the first 1,000 units is $100 each and $50 each for all units in excess of 1,000. The price for the first 1,000 is not retroactively adjusted once volumes exceed 1,000 units and the supplier believes the OEM will purchase a minimum of 1,000 components. After the initial 1,000 components, the supplier believes there is a 60% probability that the OEM will purchase an additional 200 components, a 30% probability the OEM will purchase an additional 500 units and a 10% probability that the OEM will purchase an additional 700 units. The supplier’s assumptions are based on experience with this OEM with similar contracts, its ongoing relationship with the OEM, and its insight regarding the OEM’s planned production. The supplier has determined that a probability-weighted estimate is more predictive of the amount it expects to be entitled to receive than an estimate based on the most likely amount.

How should the supplier determine the transaction price?

**Discussion:** The supplier should consider the total volume discounts expected to be taken under the contract and the facts and circumstances surrounding a possible change in volume to determine the transaction price. The supplier appears to have a reasonable basis to make such estimates. Therefore, the per-component price is $87.31 (probability-weighted consideration of $117,000/probability-weighted number of parts of 1,340), determined as follows.

**Probability-weighted consideration**

<table>
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<tr>
<th>Consideration</th>
<th>Amount</th>
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<tr>
<td>$110,000 ((1,000 x $100) + (200 x $50)) x 60% probability</td>
<td>$66,000</td>
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<tr>
<td>$125,000 ((1,000 x $100) + (500 x $50)) x 30% probability</td>
<td>$37,500</td>
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<tr>
<td>$135,000 ((1,000 x $100) + (700 x $50)) x 10% probability</td>
<td>$13,500</td>
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<tr>
<td><strong>Total probability weighted consideration</strong></td>
<td><strong>$117,000</strong></td>
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</tbody>
</table>

**Probability-weighted number of parts**

<table>
<thead>
<tr>
<th>Parts</th>
<th>Probability</th>
</tr>
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<tbody>
<tr>
<td>1,200 components x 60%</td>
<td>720</td>
</tr>
<tr>
<td>1,500 components x 30%</td>
<td>450</td>
</tr>
<tr>
<td>1,700 components x 10%</td>
<td>170</td>
</tr>
<tr>
<td><strong>Total probability-weighted number of parts</strong></td>
<td><strong>1,340</strong></td>
</tr>
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</table>
These amounts are subject to the new standard’s constraint on variable consideration as the price per unit is variable based on the number of components sold. The supplier appears to have predictive experience with similar performance obligations and therefore believes it is probable there will not be a significant revenue reversal if the estimates of sales volume changes. Any change in the estimate of the number of components purchased is recognized as a change in transaction price in the period of change using a cumulative catch-up approach (changes in variable consideration are accounted for as a change in transaction price). Based on the facts presented, it would be appropriate to include the variable consideration in the total transaction price.

**Example 8 - Allocating the transaction price (additional cash incentive)**

**Facts:** An OEM sells a vehicle with three years of maintenance to a dealer for $40,000. The standalone selling price of the vehicle and the maintenance services is $40,000 and $2,000, respectively. Therefore, there is a $2,000 discount inherent in the transaction price. After the OEM’s sale of the vehicle to the dealer, but prior to the dealer’s sale to the retail customer, the OEM adds an additional cash incentive of $500 which was not contemplated when the vehicle was sold to the dealer. This would result in a reduction to the transaction price of $500 (from $40,000 to $39,500).

How should the OEM account for the added incentive—specifically, should it be allocated to both the satisfied and unsatisfied performance obligations or to just the remaining unsatisfied performance obligation?

**Discussion:** Rebates are variable consideration and accounted for as an adjustment to the transaction price. A change in transaction price that does not involve a contract modification is normally allocated to each performance obligation in the contract on the same basis as at contract inception. This includes satisfied and unsatisfied performance obligations. The transaction price is decreased to $39,500 and, using the relative standalone selling prices of the two performance obligations, the $500 rebate is allocated to the vehicle and maintenance services in the amounts of $476 ($500 x (40,000/42,000)) and $24 ($500 x (2,000/42,000)), respectively. The amount allocated to a satisfied performance obligation (in this case, the vehicle) is recognized as a reduction of revenue in the period in which the change in transaction price occurs.

Since there are normally no specific terms between the OEM and the dealer related to the rebate offers (as they relate to the sale of the vehicle to the dealer), it would be difficult to conclude that the entire additional rebate could be allocated to only the vehicle sale (as opposed to being allocated between the vehicle and the maintenance services based on relative selling price).

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**Recognize revenue when performance obligations are satisfied**

Revenue recognition under current guidance is based primarily on the transfer of risks and rewards. Under the new standard, revenue is recognized upon the satisfaction of an entity’s performance obligations, which occurs when control of a good or service transfers to the customer. Control can transfer either at a point in time or over time. The change to a control-based standard will require careful assessment of when an entity should recognize revenue. The timing of when revenue is recognized might be consistent with current practice for many automotive contracts related to the sale of production goods. This should, however, not be assumed for all contracts, in particular for tooling contracts, engineering, research and development contracts and contracts to build prototypes.

Contracts between suppliers and OEMs for the sale of tooling and prototypes (where ownership transfers from the supplier to the OEM) are common and can take several different forms. The supplier may receive a lump-sum payment from the OEM in some arrangements, while in others the supplier may be reimbursed periodically as certain milestones are met. Suppliers will have to assess the terms of the contract to determine if control transfers at a point in time or over time.

If control transfers at a point in time, the new standard provided some indicators to determine when control has transferred. Those indicators include 1) the seller has a right to payment, 2) the customer has legal title, 3) the customer has physical possession, 4) the customer has significant risks and rewards of ownership, and 5) the customer has accepted the asset. No one factor is determinative on a standalone basis.
Potential impact:

The new guidance will require an entity to determine when control of the good or service has transferred to the customer. The timing of revenue recognition could change when evaluated based on a transfer of control rather than transfer of risks and rewards of ownership. Overall this could result in earlier recognition if contracts are determined to transfer control over time. The effect of combining contracts and allocating transaction prices based on the separate performance obligations could also result in earlier revenue recognition. For example, tooling arrangements often are priced with the intent to be margin-neutral (that is, the supplier will be reimbursed for actual cost). If the tooling and parts contracts are combined, and each is considered a separate performance obligation, then a portion of the margin from the parts supply arrangement would likely be allocated to the tooling as part of the relative standalone selling price allocation.

Example 9 - Recognize revenue (for an obligation that is satisfied over time)

**Facts:** A supplier enters into a contract with an OEM to (1) construct a Tool for the OEM, and (2) supply the OEM with parts using the Tool. The Tool and the supply arrangements are separate performance obligations and the supplier would incur significant economic losses if it were to attempt to re-work the Tool for another OEM if the OEM terminates the contract (i.e., there is no alternative use for the Tool). The OEM is contractually obligated to reimburse the supplier for its costs to date including a reasonable profit margin to construct the Tool if the OEM cancels the contract other than for breach. Accordingly, the Tool would qualify as a performance obligation satisfied over time.

How should revenue related to the Tool be recognized?

**Discussion:** In this example, the Tool performance obligation is satisfied over time because the supplier’s performance does not create an asset with an alternative use and the supplier has the enforceable right to payment which should include a recovery of the costs incurred by the entity plus a reasonable profit margin. In other arrangements, the enforceable right to payment may only include recovery of the costs incurred by the entity and therefore an entity may not meet this criterion. In that case, an entity would need to evaluate whether the entity’s performance creates or enhances an asset and if the customer controls the asset as it is created to determine if the performance obligation is satisfied over time.

The supplier will need to select the most appropriate recognition method (either an input or output method) to measure its performance over the contract term if revenue is recognized over time. An output method, such as units produced, may be appropriate if the entity includes in its revenue measure the work-in-progress and completed-but-not-delivered items that are controlled by the customer. The supplier might conclude an input method is more appropriate if there is a direct relationship between the entity’s inputs and the transfer of control of goods or services to the customer.

Example 10 - Recognize revenue (for an obligation where control transfers at completion)

**Facts:** Assume the same facts as in Example 9, except:

- The OEM can cancel the contract at any time without a termination or make-whole payment because the Tool can be readily used to produce parts for other OEMs; and
- Title (assumption of control) of the Tool passes to the OEM only upon its completion and acceptance by the OEM.

How should the supplier recognize revenue?

**Discussion:** In this example, the Tool has an alternative use by the supplier, and control of the Tool is not transferred to the OEM during the work-in-process phase. The supplier also does not have the right to payment for performance completed to date (including a reasonable profit margin) in the event of a contract termination by the OEM. Revenue should be recorded when the tool is completed and control is transferred.
Other considerations

Product warranties

Product warranties are common in the automotive industry. Both OEMs and suppliers routinely provide product warranties to their customers. Suppliers generally provide a standard warranty to all customers that the product complies with agreed-upon specifications for a specified period. OEMs generally provide a standard warranty on vehicles for a certain number of years or a specified mileage. OEMs might also provide an extended warranty or certain services (for example, maintenance or roadside assistance) in addition to the standard warranty coverage.

The new standard draws a distinction between product warranties that the customer has the option to purchase separately and those that cannot be purchased separately. Companies will need to exercise judgment when assessing warranties which are not sold separately to determine if there is a service component inherent in the warranty that needs to be accounted for as a separate performance obligation.

<table>
<thead>
<tr>
<th>New model</th>
<th>Current U.S. GAAP</th>
<th>Current IFRS</th>
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<tbody>
<tr>
<td>Warranties that the customer has the option to purchase separately give rise to a separate performance obligation. A portion of the transaction price is allocated to that separate performance obligation at contract inception.</td>
<td>Entities typically account for warranties that cover latent defects in accordance with existing loss contingency guidance. An entity recognizes revenue and concurrently accrues any expected warranty cost when the product is sold. Revenue from separately priced extended warranty contracts is deferred and recognized over the expected life of the contract.</td>
<td>Revenue is typically recognized at the time of sale for products that are sold with a standard warranty, and a corresponding provision is recognized for the expected warranty cost. A product sold with an extended warranty is treated as a multiple element arrangement. Revenue from the sale of the extended warranty is deferred and recognized over the period covered by the warranty. No costs are accrued at the inception of the extended warranty agreement.</td>
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<tr>
<td>The warranty should be accounted for as a cost accrual if it promises that the product complies with the specifications in the contract and the customer does not have the option to purchase a warranty from the entity separately. An entity might provide a warranty that calls for a service to be provided to the customer (for example, maintenance) in addition to a promise that the product complies with agreed-upon specifications. If the entity cannot reasonably separate the two obligations, they should account for both together as one performance obligation.</td>
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The new guidance is similar to current accounting for warranties in many cases. There might, however, be situations where the accounting for warranties could result in revenue deferral—for example, when the entity’s warranty provides a service to the customer in addition to a promise that the product complies with the specifications in the contract. Entities will need to determine which, if any, part of their product warranty contains a service component and should account for the service component as a separate performance obligation, deferring revenue relating to that service and recognizing it as the service is provided.

Entities that offer separately priced warranties might also be affected, as the arrangement consideration will be allocated on a relative standalone selling price basis rather than at the extended warranty contract price if the contracts for the vehicle and the separately priced warranty are combined.
**Contract costs**

Entities in the automotive industry may incur costs to design and develop products and tooling or to build tooling that is not sold to the OEM (that is, the supplier retains ownership and the tooling is not a performance obligation). Suppliers might incur costs to develop tooling, for example, in anticipation of a long-term supply arrangement. A contract might exist prior to the costs to develop the tooling being incurred. In other instances, a contract might not be agreed to until after costs have been incurred. These costs may be either expensed as incurred, or capitalized and amortized to expense as the related revenue is recognized under current U.S. GAAP and IFRS. This current accounting treatment depends on a number of considerations, including the nature of the costs and the tooling being developed, whether the supplier has a non-cancellable right to use the tooling, and whether the supplier will be reimbursed for the costs incurred.

The new standard includes guidance on both costs to obtain and costs to fulfill a contract, and may change current practice. Under the new standard, incremental costs of obtaining a contract should be recognized as an asset so long as the costs are expected to be recovered. As a practical expedient, such costs may be expensed as incurred if the amortization period is one year or less. Capitalized costs are amortized as control of the related goods or services transfers to the customer. Direct costs of fulfilling a contract will generally be expensed as incurred under the new standard (if not within the scope of other standards), unless they generate or enhance a resource to be used to satisfy future performance obligations, and are expected to be recovered.

Costs associated with pre-production activities, such as those associated with long-term supply arrangements, might be capitalized more often under the new standard than under both current U.S. GAAP and current IFRS.

**Financing arrangements**

Many OEMs have finance arms that serve as a potential finance source for customers that lease or buy vehicles from dealers. When a dealer and an end customer enter into an arrangement for the end customer to lease a vehicle, the dealer will often either sell the vehicle and the related lease to the OEM’s financing division (that leases the vehicle to the end customer), or to a third-party finance company. When vehicles sold to dealers are repurchased by an OEM's financing division, the OEM must meet certain conditions, particularly under current U.S. GAAP, in order to recognize revenue on the initial sale of the vehicle when the vehicle is delivered to the dealer. A different set of conditions must be met for the OEM to recognize revenue on the initial sale to the dealer if the vehicle and lease are sold to a third-party finance company. These specific conditions are not included in IFRS; rather, revenue is generally recognized from sales to dealers or distributors when the risks and rewards of ownership have passed.

OEMs generally meet the current criteria to recognize revenue at the time of sale to the dealer. For transactions involving the OEM’s finance affiliate, a significant change in the timing of revenue recognition is not expected as a result of the change in the guidance. This is because the new standard requires revenue to be recognized when control is transferred and it is likely that control has transferred if the transaction met the specific criteria under existing guidance. The new guidance may result in earlier revenue recognition for OEMs that did not meet the current U.S. GAAP criteria for revenue recognition in instances where the dealer’s sales are to third-party finance companies and the sales are coupled with other agreements, such as residual value guarantees. Significant changes in the timing of revenue recognition under IFRS are not expected in either scenario.

**Repurchase options and residual value guarantees**

OEMs sell vehicles to certain customers under contracts (for example, daily rental car companies) that often provide the customer with a put option or residual value guarantee. These options generally provide a guaranteed residual value to the customer when the customer sells the vehicle. Two common scenarios include: (a) the OEM agrees to reacquire the vehicle at a guaranteed price, or (b) the OEM reimburses customers for any discrepancy between the sales proceeds received for the vehicle and the guaranteed minimum resale value. There is currently specific U.S. GAAP that requires these contracts to be accounted for as leases. IFRS does not contain specific guidance on how to account for such arrangements.

Under the new guidance, contracts containing repurchase options will be accounted for as a lease when the customer has the right to require the OEM to repurchase the vehicle and the customer has a significant economic incentive to exercise that right. To determine whether a customer has a significant economic incentive to exercise its right, an entity should consider various factors, such as the relationship of the repurchase price to the expected market value of the vehicle at the date of repurchase and the amount of time until the right expires. The customer has an economic
incentive to exercise the put option if the repurchase price is expected to significantly exceed the market value of the vehicle at the time of repurchase.

Contracts may require the OEM to reimburse the customer for any deficit between the customer’s sales proceeds received for the vehicle and a guaranteed minimum resale value. An entity should consider the guidance in the relevant financial instruments standard to determine the amount of the liability to be established for the residual value guarantee, with a corresponding reduction to the transaction price.

**Right of return**

Return rights in the automotive industry are common and come in a variety of forms. Revenue is not recognized for goods expected to be returned and a liability should be recognized for the expected amount of refunds to customers. An asset and corresponding adjustment to cost of sales should be recognized for the right to recover goods from customers upon settling the refund liability. This asset will initially be measured at the cost of the inventory sold, less any cost to recover. The asset will also need to be assessed for impairment each reporting period.

The effect of product returns under the new standard will be largely unchanged from current guidance under U.S. GAAP and IFRS. The primary difference is that the balance sheet will reflect the refund obligation and the asset for the right to goods to be returned on a gross basis. Companies will use a probability-weighted or most likely outcome approach, whichever is most predictive, to determine the likelihood of a sales return under the new standard.
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**Questions?**

PwC clients who have questions about this *In depth* should contact their engagement partner. Engagement teams who have questions should contact members of the Revenue team in the National Professional Services Group (1-973-236-7804 or 1-973-236-4377).

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