

# In depth

## A look at current financial reporting issues



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## Revenue from contracts with customers

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

## Aerospace and defence industry supplement

### At a glance

On 28 May, the IASB and FASB 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 2014-02 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 Aerospace and Defence (A&D) industry as they transition to the new standard. These areas include, but are not limited to, contract combinations, transfer of control, and contract costs.

### Overview

The IASB and FASB developed a single, comprehensive revenue recognition model for all contracts with customers to achieve greater consistency in the recognition and presentation of revenue. The model in the new standard is a five-step model that results in an entity recording revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Revenue is recognised based on the satisfaction of performance obligations, which occurs when control of a good or service transfers to a customer.

The new revenue standard could significantly affect entities in the A&D industry. Currently, several accounting standards are commonly used to recognise revenue and related costs in the A&D industry. Defence and commercial aviation equipment programmes are often complex and expensive, and performance under these contracts typically spans multiple years. For entities reporting under US GAAP, these programmes generally follow construction contract guidance. Under IFRS, both the guidance under IAS 18, *Revenue*, and IAS 11, *Construction contracts*, are applied in practice. Long-term maintenance contracts for commercial aviation equipment and performance-based logistics contracts for military equipment are also common. These contracts can extend up to 20 years and require significant estimates of costs to perform under these contracts over the performance period.

## Identifying performance obligations

Under current guidance, contractors often account for each contract in the scope of construction accounting at the contract level, except in circumstances where it meets the criteria for combining contracts or segmenting a contract. The new standard requires consideration of the separate performance obligations in a contract. A performance obligation is a promise to transfer a good or service to a customer. Determining the separate performance obligations might not be simple due to the complexity of A&D contracts. Contracts commonly contain integrated systems and combinations of products and services.

New standard	Current US GAAP	Current IFRS
<p><b>Performance obligations</b></p> <p>At contract inception, an entity should assess the goods or services promised in a contract with a customer and identify as a performance obligation each promise to transfer to the customer either:</p> <ul style="list-style-type: none"> <li>• a good or service (or a bundle of goods or services) that is distinct; or</li> <li>• a series of distinct goods or services that are substantially the same and have the same pattern of transfer to the customer. This is the case if both the following criteria are met: <ul style="list-style-type: none"> <li>○ each distinct good or service in the series that the entity promises to transfer to the customer would be a performance obligation satisfied over time; and</li> <li>○ the same method would be used to measure the entity's progress towards complete satisfaction of the performance obligation to transfer each distinct good or service in the series to the customer.</li> </ul> </li> </ul> <p><u>Distinct goods or services</u></p> <p>A good or service (or bundle of goods or services) is distinct if both of the following criteria are met:</p> <ul style="list-style-type: none"> <li>• 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; and</li> </ul>	<p>The unit of accounting for measuring contract performance and recognising revenue is typically the contract. A series of contracts may be combined or a contract may be segmented if the criteria for combining or segmenting contracts are met.</p> <p>There is no further guidance for separately accounting for more than one deliverable in a construction contract under the construction contract guidance.</p>	<p>The unit of account for measuring contract performance and recognising revenue is typically the contract. In some circumstances, it is necessary to combine or segment contracts in order to reflect the substance of the contract or of a group of contracts.</p> <p>There is no further guidance for separately accounting for more than one deliverable in a construction contract.</p>

New standard	Current US GAAP	Current IFRS
<ul style="list-style-type: none"> <li>the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract.</li> </ul> <p>Determining whether the good or service is distinct requires judgement. One factor that would indicate that the good or service is distinct is if the entity regularly sells a good or service separately.</p> <p>Factors that indicate a good or service is not distinct include:</p> <ul style="list-style-type: none"> <li>The entity provides a significant service of integrating the good or service with other promised goods and services.</li> <li>The good or service significantly modifies or customises another promised good or service.</li> <li>The good or service is highly dependent on, or highly interrelated with, other promised goods or services.</li> </ul>		
<p><b>Combining contracts</b></p> <p>Contracts will be combined and accounted for as a single contract only if they are entered into at or near the same time, with the same customer (or related parties), and one or more of the following criteria are met:</p> <ul style="list-style-type: none"> <li>The contracts are negotiated as a package with a single commercial objective.</li> <li>The amount of consideration to be paid in one contract depends on the price or performance of the other contract.</li> <li>The goods or services promised in the separate contracts are a single performance obligation.</li> </ul>	<p>Combining contracts is permitted, provided certain criteria are met. Combining is not required as long as the underlying economics of the transaction are fairly reflected.</p>	<p>Combining contracts is required when certain criteria are met.</p>

New standard	Current US GAAP	Current IFRS
<p><b>Contract options</b></p> <p>An option in a contract to acquire additional goods or services gives rise to a performance obligation only if it provides a material right to the customer that it would not have received without entering into the contract. For example, an option that provides a customer with a significant discount on goods or services in the future that is not available to similar customers is a material right. However, an option to buy additional goods or services at their stand-alone selling price is a marketing offer and therefore not a material right.</p> <p>If the option provides a material right, a portion of the transaction price is allocated to the option based on its estimated stand-alone selling price. An entity will recognise revenue allocated to the option when the option expires or when the additional goods or services are transferred to the customer.</p>	<p>Contract options, which are generally an option to purchase additional units of a product at previously agreed-upon pricing, might be included in the original contract or accounted for separately, depending on the circumstances.</p> <p>When an option is determined to be substantive, an entity evaluates whether that option has been offered at a significant incremental discount. If the discount is significant, a presumption is created that an additional deliverable is being offered in the arrangement requiring a portion of the arrangement consideration to be deferred at inception.</p>	<p>Contract options, which are generally an option to purchase additional units of a product at previously agreed upon pricing, might be included in the original contract or accounted for separately, depending on the circumstances.</p> <p>If an entity grants to its customers, as part of a sales transaction, an option to receive a discounted good or service in the future, the entity accounts for that option as a separate component of the arrangement and therefore allocates consideration between the initial good or service provided and the option.</p>
<p><b>Contract modifications (for example, change orders)</b></p> <p>A contract modification occurs when the parties approve a change that either creates new, or changes the existing, enforceable rights and obligations. Approval can be in writing, oral, or implied by customary business practices. Management will need to determine when a modification, such as a claim or unpriced change order, is approved and therefore creates enforceable rights and obligations. Revenue related to a modification is not recognised until it is approved.</p> <p>A contract modification is treated as a separate contract if it results in the addition of a separate performance obligation and the price reflects the stand-alone selling price of that performance obligation. Otherwise, a modification (including those that only affect the transaction price) is accounted for as an adjustment to the</p>	<p>A change order is included in contract revenue when it is probable that the customer will approve the change order and the amount of revenue can be reliably measured.</p> <p>US GAAP includes detailed revenue and cost guidance on the accounting for unpriced change orders (or those in which the work to be performed is defined, but the price is not).</p>	<p>A change order (known as a variation) is included in contract revenue when it is probable that the customer will approve the change order and the amount of revenue can be reliably measured.</p> <p>There is no specific guidance on the accounting for unpriced change orders.</p>

New standard	Current US GAAP	Current IFRS
<p>original contract, either prospectively or through a cumulative catch-up adjustment.</p> <p>An entity will account for a modification prospectively if the goods or services in the modification are distinct from those transferred before the modification. An entity will account for a modification through a cumulative catch-up adjustment if the goods or services in the modification are not distinct and are part of a single performance obligation that is only partially satisfied when the contract is modified.</p>		

### Impact – both IFRS and US GAAP:

Preparers will need to apply judgement regarding the identification of performance obligations in a contract and when performance obligations should be separately accounted for or combined. This evaluation might cause fewer of an entity's contracts to be accounted for at the contract level.

The new revenue guidance introduces the concept of determining whether a good or service (or a bundle of goods or services) is distinct. A good or service that is distinct will be accounted for as a separate performance obligation. A&D contracts often involve complex integrated systems. Judgement will be required to determine whether aspects of these systems represent a distinct good or service.

If the criteria are met, contracts must be combined, which is a change from the election permitted under existing US GAAP, although the criteria used to combine contracts have not changed significantly. For entities reporting under IFRS, no significant change is expected, given that combining contracts is required under existing guidance if certain criteria, similar to those in the new revenue standard, are met.

It is common in the A&D industry that customers often change the contract specifications and requirements, particularly for a development contract. The contractor is typically authorised to proceed with the changes, even though the price has not been finalised. Contract modifications under both current guidance and the new standard require judgement to determine whether they should be combined with the original contract. The accounting for modifications combined with the original contracts is not expected to change significantly compared to existing guidance under both IFRS and US GAAP.

### Example 1 – Identifying performance obligations – design and build

**Facts:** A contractor enters into a contract to design a new experimental aircraft and manufacture ten identical prototype units of the aircraft. The new aircraft design includes certain key functionality that has not been proven in an aircraft application. It is expected that the design of the aircraft will be modified during production of the prototypes and that any given prototype might be modified based on the design changes and learnings from other prototypes. The deliverable to the customer is the prototype units; the customer does not obtain rights to the new aircraft design apart from the units.

Are the design services and build of the prototypes distinct performance obligations?

**Discussion:** The design services and manufacturing of the prototypes might be two distinct performance obligations, but the specific facts and circumstances of the contract will need to be assessed, such as whether the design activities represent the transfer of a service to the customer and whether the customer can benefit from the design services

without the prototypes. Even if the services could be considered distinct, the contractor might still be required to account for the bundle of goods and services (design and build) as a single performance obligation if the contractor provides a significant service of integrating goods or services promised in the contract or if some of these goods and services significantly modify or customise others in the contract. In this particular fact pattern, the entity expects to continually modify the prototypes due to design changes that are expected to occur during production. While the design and production might have benefits on their own, in the context of the contract they are not separable. This is because the entity has determined that both are highly dependent on and highly interrelated with each other.

### *Example 2 – Identifying performance obligations – series of distinct goods – commercial contract*

**Facts:** A jet engine maker has a contract to provide engines for 50 twin-engine aircraft over a 36-month period. The engine specified in the contract is a fully developed engine that the engine maker has been manufacturing and selling for the past five years. Design services are not included in the contract. The engine maker has had other similar contracts to sell this specific engine in quantities that range from 20 to 100 engines per contract. Additionally, the engine maker routinely sells individual engines (unit of one) as spares and components of the engine as spare parts. The engine maker has concluded that each engine is a distinct good that is separately identifiable because (1) they are not providing a service of integrating the engine with another good or service that represents the combined output that the customer is contracting to receive; (2) the engines do not modify any other good or service in the contract; and (3) the engines are not highly interrelated with other engines such that a customer decision not to buy certain engines would not significantly affect the engines being purchased.

How many distinct performance obligations are in the contract?

**Discussion:** In this fact pattern, the engine maker has concluded that each engine is a distinct good. However, all 100 engines can still be considered a single performance obligation if (a) they are a series of engines that are substantially the same, and (b) each engine in the series transferred consecutively would meet the criteria to be a performance obligation satisfied over time, and the same method would be used to measure the entity's progress to depict the transfer of each engine.

Determining whether each engine is a performance obligation satisfied over time will depend on the terms of the contract. In the case of a commercial contract, the customer does not typically control the asset as it is produced (unlike a government contract). The jet engine maker will need to assess whether the engine meets the criteria of no alternative use and right to payment to determine whether each engine meets the criteria to be a performance obligation satisfied over time. If the criteria are met, the 100 engines can be considered a single performance obligation. Refer to the 'Determining transfer of control' section for guidance on measuring progress for a performance obligation satisfied over time. If the criteria for a performance obligation satisfied over time are not met, then each engine is a separate performance obligation.

It is important to note that, while engine components are routinely sold, the integration of individual components within each engine is essential to what the contractor has promised to the customer in the contract. Therefore, the components do not represent separate performance obligations. The answer would likely be different if a customer was ordering a bundle of components to maintain engines it already operates. In that case, each component might be a separate performance obligation.

### *Example 3 – Identifying performance obligations – series of distinct goods – government contract*

**Facts:** A manufacturer has a contract to provide 50 communication equipment units to the government over a one-year period. The contractor has been manufacturing and selling this equipment for the past three years. The government controls the work in process as the units are being produced. The government does not have the ability to modify the design. The contractor has concluded that each unit is a distinct good that is separately identifiable because (1) they are not providing a service of integrating the unit with another good or service that represents the combined output that the government is contracting to receive; (2) the units do not modify any other good or service in the contract; and (3) the units are not highly interrelated with other units such that a customer decision not to buy certain units would not significantly affect the units being purchased.

How many distinct performance obligations are in the contract?

**Discussion:** The transfer of the 50 communication equipment units would likely be accounted for as a single performance obligation as (a) they are a series of units that are substantially the same, and (b) each unit in the series individually would meet the criteria to be a performance obligation satisfied over time and the same method would be used to measure the entity's progress to depict the transfer of each unit. Refer to the 'Determining transfer of control' section for guidance on measuring progress for a performance obligation satisfied over time.

#### **Example 4 – Unpriced change orders**

**Facts:** A contractor enters into a contract with a customer to develop an aircraft system. After development starts, the customer changes the specifications of the system. The contractor is asked to process the changes; however, the price has not yet been approved and is not expected to be approved before the development is completed. These types of changes are common and the contractor has a history of executing unpriced change orders.

When should the contractor account for these change orders?

**Discussion:** The changes in the system specifications should be accounted for when a contract modification exists. A contract modification, such as an unpriced change order, exists when the parties to the contract approve a modification that creates or changes the enforceable rights and obligations of the parties. Determining whether there is a valid expectation that the price modification will be approved is based on facts and circumstances. The contractor might be able to determine that it expects the price of the scope change to be approved based on its experience. If so, the contractor should account for the changes in the system specifications upon making that determination. The contractor should estimate the transaction price based on a probability-weighted or most likely amount approach (whichever is most predictive), provided that it is highly probable (IFRS) or probable (US GAAP) that a significant reversal in the amount of cumulative revenue recognised will not occur when the price of the change order is approved (refer to the 'Variable consideration and the constraint on revenue recognition' section). Estimates of unpriced change orders need to be re-evaluated at each reporting period.

The contractor will also need to determine whether the unpriced change order should be accounted for as a separate contract. When a change order is combined with the original contract and the remaining goods or services are part of a single performance obligation that is partially satisfied, the contractor should update the transaction price and measure of progress towards completion of the contract accordingly. The contractor will recognise the effect of the contract modification as revenue (or as a reduction of revenue) at the date of the contract modification on a cumulative catch-up basis.



## Variable consideration and the constraint on revenue recognition

The transaction price is the amount of consideration that an entity expects to be entitled to in exchange for transferring promised goods or services to a customer. The transaction price might include an element of consideration that is variable or contingent on the outcome of future events. Examples of arrangements in the A&D industry with variable consideration include contracts with awards and incentive fees for achieving a successful outcome or completion by a specific date.

New standard	Current US GAAP	Current IFRS
<p><b>Awards and incentive fees</b></p> <p>Awards/incentive payments are estimated using either a probability-weighted approach or an estimate of the most likely amount (whichever is more predictive).</p> <p>Awards/incentive payments should be included in the transaction price to the extent that it is highly probable (IFRS) or probable (US GAAP) that a significant cumulative revenue reversal will not occur in future periods if estimates of the variable consideration change. Factors that could increase the likelihood or the magnitude of a revenue reversal include:</p> <ul style="list-style-type: none"> <li>• The amount of consideration is highly susceptible to factors outside the entity's influence.</li> <li>• The uncertainty about the amount of consideration is not expected to be resolved for a long period of time.</li> <li>• The entity's experience (or other evidence) with similar types of contracts is limited, or that experience has limited predictive value.</li> <li>• The entity has a practice of either offering a broad range of price concessions or changing the payment terms and conditions of similar contracts in similar circumstances.</li> <li>• The contract has a large number and broad range of possible consideration amounts.</li> </ul>	<p>Awards/incentive payments are included in contract revenue when the specified performance standards are probable of being met or exceeded and the amount can be estimated.</p>	<p>Awards/incentive payments are included in contract revenue when the specified performance standards are probable of being met or exceeded and the amount can be reliably measured.</p>



New standard	Current US GAAP	Current IFRS
<b>Claims</b>  Entities can submit claims to their customers for additional transaction consideration due to costs being higher than expected. Claims that can affect the amount of consideration that an entity is entitled to receive in exchange for transferring goods or services are accounted for as variable consideration. The treatment of such claims is similar to the treatment for awards/incentive fees above.	A claim is recorded as contract revenue when it is probable and can be estimated reliably (determined based on specific criteria), but only to the extent of contract costs incurred. Profits on claims are not recorded until they are realised.	A claim is included in contract revenue only if negotiations have reached an advanced stage such that it is probable that the customer will accept the claim and the amount can be reliably measured.

### Impact – both IFRS and US GAAP:

The evaluation of variable consideration will require judgement. In some cases, revenue will be recognised before all contingencies are resolved, which might be earlier than under current guidance. Entities might need to recognise the minimum amount of revenue that they expect to be entitled to when control transfers, as long as it is ‘highly probable’ (IFRS) or ‘probable’ (US GAAP) that the amount of cumulative revenue recognised is not subject to a significant reversal of cumulative revenue in the future if estimates of variable consideration change.

Using a most likely or probability-weighted estimate approach to determine the transaction price in arrangements involving bonuses, claims, and award fees might provide results similar to today when estimating the contract price under the construction contract guidance.

### Example 5 – Award fees

**Facts:** A contractor enters into a contract for a satellite launch for the government. The contract price is C250 million plus a C25 million award fee if the system is placed into orbit by a specified date. The contract is expected to take three years to complete. The contractor has a long history of rocket launches. The award fee is binary and payable in full upon successful launch of the satellite. That is, the contractor will receive no award fee if the launch is unsuccessful. The contractor believes, based on its long history of relevant experience with similar programmes, that it is 95 percent likely that the contract will be completed successfully and in advance of the target date.

How should the contractor account for the award fee?

**Discussion:** The contractor is likely to conclude, given the binary award fee, that it is appropriate to use the most likely amount approach in determining the amount of variable consideration to include in the estimate of the transaction price. The contract’s transaction price is therefore C275 million: the fixed contract price of C250 million plus the C25 million award fee (the most likely amount). This estimate should be regularly revised and adjusted, as appropriate, using a cumulative catch-up approach, which is consistent with current practice.

The contractor will need to determine whether it is highly probable (IFRS) or probable (US GAAP) that a significant reversal in the amount of cumulative revenue recognised will not occur in the future. ‘Significant’ is not defined in the standard. Factors to consider include, but are not limited to:

- It is largely within the contractor’s control to complete the work before the targeted date.
- The uncertainty is expected to be resolved before three years.
- The contractor has a long history of performing this type of work on similar programmes.
- The contractor does not expect that the payment terms will change.

- There are only two possible final consideration amounts.

The contractor might conclude in these circumstances that it is highly probable (IFRS) or probable (US GAAP) that a significant reversal in the amount of cumulative revenue recognised will not occur in the future. The new guidance should not result in a significant change from today's accounting for variable consideration in many A&D contracts, but an assessment will need to be made based on the specific facts and circumstances of each contract.

### Example 6 – Claims

**Facts:** Assume the same fact pattern as Example 5, except that, due to reasons outside the contractor's control (for example, customer-caused delays and design changes), the cost of the contract far exceeds original estimates, but a profit is still expected in the contract. The contractor submits a claim against the government to recover a portion of these costs. The claim process is in its early stages, but the contractor has a long history of successfully negotiating claims with the government.

How should the contractor account for the claim?

**Discussion:** Claims are highly susceptible to external factors (such as the judgement of third parties), and the possible outcomes are highly variable. The contractor might have experience in successfully negotiating claims; however, before the contractor can include claims in its estimate of contract price, it would have to assess whether (1) the claim is enforceable under the contract, and (2) it is probable that a significant reversal in the amount of cumulative revenue recognised will not occur once the claim is resolved. The contractor would evaluate factors such as whether the amount of consideration is highly susceptible to factors outside their control, relevant experience with similar claims and the period of time before resolution of the claim to determine the likelihood or magnitude of a revenue reversal.

The amount of the claim is excluded from the transaction price until the contractor believes that it is highly probable (IFRS) or probable (US GAAP) that the amount would not be subject to significant reversal of cumulative revenue in future periods. For performance obligations satisfied over time, this results in the claim amount being excluded from the calculation of revenue when the measure of progress is applied. Amounts from claims are likely to be included in the transaction price at a date closer to the date when the claim is expected to be resolved.

It could be highly probable (IFRS) or probable (US GAAP) that some portion of the claim would not result in a significant cumulative revenue reversal, for example, if an entity has a history of successful negotiations. In such cases, the contractor would include that minimum amount in the estimate of transaction price.

## Existence of a significant financing component

Long-term contracts with various payment terms are common in the A&D industry. Under the new revenue standard, companies will need to assess the timing of customer payments in relation to the transfer of goods or services. Differences in timing could indicate that a significant financing component exists, either with the entity or its customer, which should be reflected in the transaction price. This could result in the company recognising interest income or expense, and total revenue could be more or less than the consideration received.

New standard	Current US GAAP	Current IFRS
<p>Contract revenue should reflect the time value of money if the contract includes a significant financing component. Entities should consider the following factors to determine if a significant financing component exists:</p> <ul style="list-style-type: none"> <li>• The difference, if any, between the amount the customer promises to</li> </ul>	<p>Receivables are discounted in limited situations, including receivables with payment terms longer than one year. The interest component is computed based on the stated rate in the agreement or on a market rate when discounting is required.</p>	<p>Receivables are discounted when the inflow of cash or cash equivalents is deferred. An imputed interest rate is used to determine the amount of revenue recognised as well as the interest income recorded over time.</p>

New standard	Current US GAAP	Current IFRS
<p>pay and the cash selling price of the goods or services.</p> <ul style="list-style-type: none"> <li>The length of time between when the entity satisfies the performance obligation and when the customer pays for the goods or services, and the prevailing interest rates in the market.</li> </ul> <p>All relevant facts and circumstances should be considered when assessing if a contract contains a financing component, including whether the intent of the parties is to provide financing.</p> <p>Management should use a discount rate that would be reflected in a separate financing transaction between the entity and its customer at contract inception, including consideration of credit risk. The discount rate does not need to be updated subsequent to contract inception.</p> <p>An entity is not required to reflect the time value of money in the transaction price when the period between payment by the customer and the transfer of goods and/or services is less than one year, even if the contract itself is for more than one year.</p>		

#### Impact – both IFRS and US GAAP:

Assessing whether a contract has a significant financing component will require judgement. An entity must determine when goods or services are transferred to the customer compared to when consideration is paid to determine if a significant financing component might exist. If there is a difference between performance and payment of one year or more, an entity will need to consider other factors to assess whether the intent of the parties was to provide financing.

A&D contract terms often contain provisions for the contractor to receive progress payments as work progresses. Progress payments that are commensurate with the progress towards completion generally indicate that there is not a significant financing component in the contract. This is typical in government contracts where the government obtains control of the goods as the work is performed. However, in some commercial contracts, transfer might occur at a point in time, which could result in a timing difference greater than one year. For example, in the case of a contract for the sale of an aircraft where control to the customer transfers as delivered, significant upfront or progress payments could indicate that the contract includes a significant financing component.

A significant financing component might not be present if the timing difference is due to reasons other than providing financing, such as award and incentive fees or other payments made to protect one party from the other failing to complete its obligations under the contract.

Long-term maintenance contracts for commercial aerospace equipment often include significant timing differences between payment and performance. Entities will have to consider whether a significant financing component exists in the contract and, if so, the effect on the transaction price. Some maintenance contracts that are common in the A&D

New standard	Current US GAAP	Current IFRS
industry provide for monthly billings to the customer based on product usage or aircraft flight hours, with revenue recognised at the time that the maintenance of the product is performed. Reflecting the time value of money could be complex, given the multiple cash payments and revenue recognition events over the life of a contract.		

## Determining transfer of control

Entities in the A&D industry often use percentage-of-completion accounting to recognise revenue as activities are performed. Percentage of completion is measured using either output methods, such as units of delivery, or input methods, such as cost incurred compared to total estimated cost. Under the new revenue standard, revenue is recognised upon the satisfaction of a contractor's performance obligations, which occurs when (or as) control of a good or service transfers to the customer. Control can transfer either at a point in time or over time. Many A&D contracts will transfer control of a good or service over time. Depending on the measure used to depict progress, applying the new standard might result in revenue being recognised in a pattern similar to today. This should not be assumed. Contractors will need to perform a careful assessment of when control transfers and revenue can be recognised.

New standard	Current US GAAP	Current IFRS
<b>Transfer of control</b>  Revenue is recognised upon the satisfaction of performance obligations, which occurs when (or as) control of the good or service transfers to the customer. Control can transfer at a point in time or, perhaps more common for the A&D industry, over time.  <u><b>Transfer over time</b></u> A performance obligation is satisfied over time if any of the following criteria are met: <ul style="list-style-type: none"> <li>• The customer simultaneously receives and consumes all of the benefits provided by the entity's performance as the entity performs.</li> <li>• The entity's performance creates or enhances an asset (work-in-progress) that the customer controls as the asset is created or enhanced.</li> <li>• 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.</li> </ul> <u><b>Alternative use</b></u>	Revenue is recognised using the percentage-of-completion method when reliable estimates are available.  When estimating the final outcome of a contract is impractical, but there is an assurance that no loss will be incurred, the percentage-of-completion method based on a zero-profit margin is used until more precise estimates can be made.  The completed-contract method is required when reliable estimates cannot be made.	Revenue is recognised using the percentage-of-completion method when reliable estimates are available.  When reliable estimates cannot be made, but there is an assurance that no loss will be incurred on a contract, the percentage-of-completion method based on a zero-profit margin is used until more precise estimates can be made.  The completed-contract method is prohibited.

New standard	Current US GAAP	Current IFRS
<p>An asset does not have alternative use to an entity if the entity is unable, either contractually or practically, to readily direct the asset for another use during the creation or enhancement of that asset. The assessment of alternative use is made at contract inception and is not updated for changes in facts or circumstances unless the parties to the contract approve a contract modification.</p> <p><u><i>Right to payment</i></u></p> <p>At any time throughout the duration of the contract, the entity must be entitled to an amount that at least compensates the entity for performance completed to date if the contract is terminated for reasons other than the entity's failure to perform as promised. The right to payment for performance completed to date does not need to be for a fixed amount.</p> <p><u><i>Transfer at a point in time</i></u></p> <p>An entity will recognise revenue at a point in time (when control transfers) if performance obligations in a contract do not meet the criteria for recognition of revenue over time.</p> <p>Determining at what point in time control transfers could require a significant amount of judgement. Indicators that control has transferred to a customer include:</p> <ul style="list-style-type: none"> <li>• The entity has a right to payment for the asset.</li> <li>• The entity transferred legal title to the asset.</li> <li>• The entity transferred physical possession of the asset.</li> <li>• The customer has the significant risk and rewards of ownership.</li> <li>• The customer has accepted the asset.</li> </ul>		

New standard	Current US GAAP	Current IFRS
<p>This list is not intended to be a checklist or all-inclusive. In evaluating when control has transferred, no factor is determinative on a stand-alone basis.</p>		
<p><b>Measuring transfer of control over time</b></p> <p>A contractor should measure progress towards satisfaction of a performance obligation that is satisfied over time using the method that best depicts the transfer of goods or services to the customer. Methods for measuring progress include:</p> <ul style="list-style-type: none"> <li>• Output methods that recognise revenue based on units produced or delivered, contract milestones, or surveys of work performed.</li> <li>• Input methods that recognise revenue based on costs incurred, labour hours expended, time elapsed, or machine hours used.</li> </ul> <p>Outputs methods such as ‘units produced’ or ‘units delivered’ might not faithfully depict an entity’s performance if, at the end of the reporting period, the value of work-in-progress or finished goods controlled by the customer is material, or if the contract provides both design and production services. In such a case, the entity’s performance is likely to have a greater value in the early part of the contract.</p> <p>The method selected should be applied consistently to similar contracts and in similar circumstances. Once the metric is calculated to measure the extent to which control has transferred, it must be applied to total contract revenue to determine the amount of revenue to be recognised.</p> <p>When using an input method, the effects of any inputs that do not represent the transfer of goods or services to the customer, such as abnormal amounts of wasted materials, should be excluded from the</p>	<p>A contractor can use either an input method (for example, cost-to-cost, labour hours, labour cost, machine hours, or material quantities), an output method (for example, physical progress, units produced, units delivered, or contract milestones), or the passage of time to measure progress towards completion.</p> <p>There are two different approaches for determining revenue, cost of revenue, and gross profit, once a ‘percentage complete’ is derived: the Revenue method, and the Gross Profit method.</p>	<p>A contractor can use either an input method (for example, cost-to-cost, labour hours, labour cost, machine hours, or material quantities), an output method (for example, physical progress, units produced, units delivered, or contract milestones), or the passage of time to measure progress towards completion.</p> <p>IFRS requires the use of the Revenue method to determine revenue, cost of revenue, and gross profit once a ‘percentage complete’ is derived. The Gross Profit method is prohibited.</p>

New standard	Current US GAAP	Current IFRS
<p>measurement of progress.</p> <p>In some circumstances, it might be appropriate to recognise revenue equal only to the costs incurred if those costs do not represent the entity's progress (such as materials procured by a third party that are not distinct and that the customer controls before the entity provides the related services).</p> <p>An entity should recognise revenue over time only if the entity can reasonably measure its progress towards complete satisfaction of the performance obligation. If an entity cannot reasonably measure its progress, but expects to recover its costs, it should recognise revenue to the extent of costs incurred until it can reasonably measure progress.</p> <p>Estimates to measure progress (for example, estimated cost to complete when using a cost-to-cost calculation) should be regularly evaluated and adjusted using a cumulative catch-up method.</p>		

### Impact – both IFRS and US GAAP:

A&D entities will need to assess their contracts to determine whether control of the asset(s) being constructed transfers over time to the buyer. Government contracts commonly require highly customised engineering and production where the government specifies the design and function of the items being produced. The products and services often have only a single customer (the government) or require government approval to sell to other customers. Government contracts also commonly require progress payments and an unconditional obligation to pay in exchange for the government controlling any work in process. Many A&D government contracts will likely meet the criteria for transfer of control over time due to these factors.

Commercial aerospace contracts also commonly include highly customised systems and components that are integrated with the aircraft design and are unique to a specific aircraft model. Whether these contracts result in the transfer of the goods or services over time will be a matter of judgement depending on the nature of the product, the contract terms, and related facts and circumstances.

The new revenue guidance allows both input and output methods for recognising revenue over time. An entity should select the method that best depicts the transfer of control of goods and services. Some government contractors have historically used the units-of-delivery method to measure progress of completion of a contract. However, under the new standard, units-of-delivery or units-of-production methods would not faithfully depict an entity's performance in satisfying a performance obligation if, at the end of the reporting period, the entity's performance has produced work in process or finished goods controlled by the customer that are not included in the measurement of the output. Accordingly, if an entity's work in process is material (to the contract or to the financial statements as a whole), it will likely need to use a method other than units-of-delivery. This could result in a change from the method that some entities use today in both government and commercial contracts.



New standard	Current US GAAP	Current IFRS
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The Gross Profit method of calculating revenue, costs of revenue, and gross profit based on the 'percentage complete' will no longer be acceptable, which is a change from current US GAAP. The Gross Profit method is already prohibited under existing IFRS.

### *Example 7 – Transfer of control over time – government contract*

**Facts:** A contractor enters into a contract with a government to build an advanced radar and weapons system. The contract has the following characteristics:

- The radar and weapons system is designed to the government's specifications that, due to the proprietary technology used, cannot be transferred to any other government or customer without approval.
- The government makes non-refundable progress payments to the contractor.
- The government can terminate the contract at any time, but is required to pay for work performed. The government has a lien against work in process; if the contractor terminates the contract, the government gets title of the work in process.
- Physical possession and title do not pass to the government until completion of the contract.

The contractor determined that the contract is a single performance obligation because the contractor is providing a service to integrate all elements of the project into a single item for the government. Also, the contractor determined that, given the lien on work in process, the government controls such work in process.

How should the contractor recognise revenue in this example?

**Discussion:** The contractor is constructing an asset and providing the related services associated with that project over the contract term.

The contractor will recognise revenue as the performance obligation is satisfied over time, using a measure of progress that best depicts the transfer of control. Given that the government controls the work in progress as the asset is constructed, the contractor will likely use an input measure (for example, cost-to-cost) to depict transfer of control as the work is performed. It is presumed that an input measure would be used, because an output measure does not take into account work in progress (or inventory) that belongs to the government.

### *Example 8 – Transfer of control at a point in time – commercial contract*

**Facts:** A manufacturer enters into a contract with a customer to produce 20 engines to be used on commercial aircraft. The customer orders a standard engine model produced by the manufacturer. The manufacturer does not produce engines in advance of future orders and only starts production when an order is placed.

The contract has the following characteristics:

- The customer is required to make progress payments over the period of production. These payments are refundable in the event of a cancellation, but the contract also provides for termination penalties in the event of contract cancellation.
- The customer can cancel the contract at any time, and any work in process remains the property of the manufacturer.
- Title to the engines passes to the customer upon shipment of each engine.

How should the manufacturer recognise revenue in this example?

**Discussion:** Given that the customer does not have physical possession, have a lien or take title to the work in process, the manufacturer will need to consider whether the engines have an alternative use and whether it has a right to payment.

Each engine might have an alternative use to the manufacturer as the model is sold to other customers, provided that the contract does not preclude the manufacturer from selling it to another customer and that costs for any rework to resell it are not significant in relation to the overall cost of the engine. If the engines have an alternative use, each engine will be considered a performance obligation satisfied at a point in time when the control of the engines transfers to the customer, which is likely to be upon shipment of each engine. Revenue will be recorded at a point in time when each performance obligation is satisfied.

## Contract costs

Existing construction contract guidance contains a substantial amount of cost capitalisation guidance, related to both pre-contract costs and costs to fulfil a contract. The new revenue standard includes contract cost guidance that could result in a change in the measurement and recognition of contract costs as compared to today.

New standard	Current US GAAP	Current IFRS
<p>Incremental costs of obtaining a contract are capitalised if the costs are expected to be recovered. Incremental costs of obtaining a contract are costs that the entity would not have incurred if the contract had not been obtained. Such costs can be expensed as incurred if the amortisation period is less than one year.</p> <p>Costs to obtain a contract that would have been incurred regardless of whether the contract was obtained are recognised as an expense when incurred (for example, marketing expenses or employees' fixed salaries), unless those costs are explicitly chargeable to the customer regardless of whether the contract is obtained.</p> <p>Direct costs incurred to fulfil a contract are first assessed to determine if they are in the scope of other standards (for example, those addressing inventory, intangibles, or fixed assets), in which case the entity should account for such costs in accordance with those standards (either capitalise or expense).</p> <p>Costs that are not in the scope of another standard are evaluated under the revenue standard. An entity recognises an asset only if the costs relate directly to a contract, generate</p>	<p>There is a significant amount of detailed guidance relating to the accounting for contract costs within the construction contract guidance. This is particularly true with respect to accounting for pre-contract costs.</p> <p>Pre-contract costs that are incurred for a specific anticipated contract generally may be deferred only if their recoverability from that contract is probable.</p> <p>Entities may recognise costs based on the average cost per unit, using estimates of total costs over the life of the contract. The average cost method often results in the deferral of contract costs that are subsequently recognised as cost of sales as additional performance takes place under the contract.</p>	<p>There is a significant amount of detailed guidance relating to the accounting for contract costs.</p> <p>Costs that relate directly to a contract and are incurred in securing the contract are included as part of contract costs if they can be separately identified, measured reliably, and it is probable that the contract will be obtained.</p>

New standard	Current US GAAP	Current IFRS
<p>or enhance resources of the entity that will be used to satisfy future performance obligations, and are expected to be recovered under the contract.</p> <p>Costs that relate directly to a contract include costs that are incurred before the contract is obtained if those costs relate to an anticipated contract that the entity can specifically identify.</p> <p>All costs relating to satisfied performance obligations and costs related to inefficiencies (that is, abnormal costs of materials, labour, or other costs to fulfil) are expensed as incurred.</p> <p>Capitalised costs to obtain or fulfil a contract are amortised on a systematic basis consistent with the pattern of transfer of goods or services to which the asset relates. The amortisation period might include specific anticipated contracts (for example, contract renewals).</p> <p>The asset recognised for the incremental costs of obtaining or fulfilling a contract should be periodically assessed for impairment. An impairment loss is recognised in profit or loss if the carrying amount of the asset exceeds:</p> <ul style="list-style-type: none"> <li>the remaining amount of consideration that the entity expects to receive in exchange for the goods or services to which the asset relates; less</li> <li>the remaining costs of providing those goods or services.</li> </ul>		

#### Impact – both IFRS and US GAAP:

A&D entities that use the average cost method or otherwise defer costs under current guidance might be affected by the new standard. Costs in the scope of another asset standard must be accounted for under that standard (which might require capitalisation or expensing as incurred). This could result in more items being expensed than under today's guidance.

An asset recognised for contract costs under the new revenue guidance might relate to both a contract and another specific anticipated contract. The asset would then be amortised over a period greater than the initial contract period. Costs attributable to each performance obligation under the contract will generally be expensed as that individual

New standard	Current US GAAP	Current IFRS
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performance obligation is satisfied.

Application of the standard to 'learning curve' costs will require judgement. Certain learning curve costs not in the scope of another asset standard might meet the criteria for capitalisation under the new standard, while others might not. Demonstrating that learning costs relate to future performance obligations could be difficult and might result in some of those costs being expensed as incurred.

### Example 9 – Contract costs

**Facts:** A contractor enters into a contract to design and build a complex missile defence system for a foreign government. Performance of the contract is expected to occur over a three-year period. The contractor utilised a third-party sales agent to help negotiate the contract. The contractor pays the agent a one-time agency fee (commission) upon successful awarding of the contract to the contractor. The contractor concludes that the contract includes a single performance obligation satisfied over time. The contractor applies a cost-to-cost method of recognising revenue.

How should the contractor account for the commission paid to the agent?

**Discussion:** The new revenue guidance requires incremental costs to acquire a contract to be capitalised and amortised over the related performance period which, in this example, would be as the missile system is built.

### Example 10 – Learning curve costs

**Facts:** A contractor enters into a contract to manufacture aerospace components for a customer that are substantially the same. The contractor determines that each component meets the criteria to be a single performance obligation satisfied over time, because any work in process is controlled by the customer. The same method would be used to measure the contractor's progress towards manufacturing each component. This results in the contractor having a series of components with the same pattern of transfer, and therefore a single performance obligation satisfied over time. The contractor estimates that each component will cost C80,000, on average, to manufacture, and it prices the contract at C100,000 per component, or C1 million. The contractor previously developed the required technology to manufacture the aerospace components, but this is its first production contract. The first two components are expected to cost C95,000 to manufacture due to the learning curve involved.

How should the contractor account for revenue and cost for this contract?

**Discussion:** The terms of the contract result in the entity having a single performance obligation that is satisfied over time. Revenue is recognised using an appropriate measure that depicts the transfer of control. The contractor has concluded that an input measure (for example, cost-to-cost) is the most appropriate measure of progress. This will result in the contractor recognising more revenue and expense for the first components produced as compared to the later components. This effect is appropriate, given that the contractor would likely charge a higher price to a customer purchasing only one unit as compared to the average unit price charged when the customer purchases more than one unit.

If the contractor determines that revenue should be recognised at a point in time (upon delivery of each product), a different conclusion could be reached. The learning curve costs would need to be assessed under other guidance, such as inventory guidance, and if they are not addressed by other standards, they would need to be assessed under the revenue guidance.

## Onerous contracts

Existing guidance for construction contracts under both IFRS and US GAAP requires recording anticipated losses when they become evident. This assessment is made at the contract level and measured based on the estimated contract revenue compared with the costs to complete the contract. The new standard does not include any new guidance on accounting for onerous contracts. Existing guidance related to onerous contracts will therefore continue to be applicable for entities using contract accounting.

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## Long-term maintenance contracts

Long-term maintenance contracts are common in the A&D industry. The accounting for such contracts is similar to extended or separately priced warranties in many instances, which are accounted for as separate performance obligations under the new standard similar to service contracts. Judgement will be needed to determine whether a long-term maintenance arrangement represents a single performance obligation satisfied over time or multiple distinct performance obligations, each satisfied when the maintenance event occurs. Contracts to perform an unspecified number of maintenance events over a period of time are likely to result in a single performance obligation satisfied over time. Contracts to perform each maintenance event at a specified price per event are likely to result in separate performance obligations for each maintenance activity.

### *Example 11 – Long-term maintenance agreement*

**Facts:** A company enters into a contract to sell an aerospace component system to a customer, and agrees to maintain that system for a period of 10 years once the system is operational. These systems are often sold in the market without the extended maintenance contract, and the maintenance contract can also be purchased separately for an additional cost.

How should the company record revenue for this contract?

**Discussion:** There are likely two performance obligations in this contract: one to deliver the aerospace component system, and a separate performance obligation for the extended maintenance. The maintenance is a separate performance obligation because it could be purchased separately by the customer. The total transaction price should be allocated to the two performance obligations based on their relative stand-alone selling prices. The aerospace component system is likely a performance obligation satisfied at a point in time, with revenue recognised when control of the product is transferred to the customer. The maintenance performance obligation is likely satisfied over time, with revenue recognised based on an appropriate measure of progress.

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## Transition

Entities will apply the new revenue standard in the first interim period within annual reporting periods beginning on or after 1 January 2017 (IFRS) and 15 December 2016 (US GAAP). Earlier adoption is permitted under IFRS, but not under US GAAP. For non-public entities (US GAAP only), the standard is effective for annual reporting periods beginning after 15 December 2017 and for interim reporting periods within annual reporting periods beginning after 15 December 2018. Earlier application is permitted for non-public entities, but no earlier than reporting periods beginning on or after 15 December 2016.

Entities can apply the new revenue standard retrospectively. Entities applying the retrospective method can elect certain practical expedients, such as not restating contracts that begin and end in the same period and using hindsight in accounting for variable consideration in completed contracts.

Entities can also choose to use the following method to simplify transition, provided that they disclose this fact in their financial statements:

- Apply the revenue standard to all existing contracts as of the effective date and to contracts entered into subsequently.
- Recognise the cumulative effect of applying the new standard to existing contracts in the opening balance of retained earnings on the effective date.
- In the year that the standard is initially adopted, provide the following additional disclosures, beginning with the first interim period:

- the amount by which each financial statement line item is affected in the current reporting period as a result of the entity applying the new revenue standard; and
- an explanation of the significant changes between the reported results under the new revenue standard and legacy guidance.

Entities will need to consider the impact of the new guidance on contract costs as part of the transition process. For all existing contracts as of the effective date, entities will need to account for the related contract costs in accordance with the new standard. Some entities might have to recognise an asset as of the transition date for expenses already incurred prior to transition if those expenses would be capitalised under the new standard.

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## About PwC's Aerospace & Defence practice

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## Questions?

PwC clients who have questions about this *In depth* should contact their engagement partner. Engagement teams that have questions should contact members of the Revenue team in Accounting Consulting Services.

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