



## In This Issue

- [Overview of the New Standard](#)
- [Lessee Accounting Model](#)
- [Lessor Accounting](#)
- [Effective Date and Transition](#)
- [Implications for O&G Entities](#)

# Production Phase of the Leases Standard Complete

## The Bottom Line

- The FASB issued [ASU 2016-02](#),<sup>1</sup> its final standard on leases, on February 25, 2016, and the IASB issued its final standard, IFRS 16,<sup>2</sup> on January 13, 2016. The leases project's primary objective was to address the current off-balance-sheet financing concerns related to a lessee's operating leases.
- The new standard defines a lease as "a contract, or part of a contract, that conveys the right to control the use of identified property, plant, or equipment (an identified asset) for a period of time in exchange for consideration."
- Although the FASB and IASB agreed to bring most leases onto the balance sheet for lessees and reached agreement on a lessee's initial measurement of the related assets and liabilities, they differed on the lessee's subsequent measurement. The FASB decided on a dual-model approach (i.e., lessees classify a lease as either a finance lease or an operating lease), while the IASB will require a single-model approach (i.e., lease classification is eliminated for lessees, and all leases are accounted for in a manner consistent with the accounting for finance leases under the FASB's approach).
- The new standard, which is effective for calendar periods beginning January 1, 2019, for public business entities and January 1, 2020, for all other entities, represents a significant change to lease accounting, and as a result, oil and gas companies will face significant implementation challenges during the transition period and beyond.

<sup>1</sup> FASB Accounting Standards Update No. 2016-02, *Leases*. The ASU supersedes FASB Accounting Standards Codification (ASC) Topic 840, *Leases*, and creates ASC 842, *Leases*. For titles of additional ASC references, see Deloitte's ["Titles of Topics and Subtopics in the FASB Accounting Standards Codification."](#)

<sup>2</sup> The IASB issued IFRS 16, *Leases*, on January 13, 2016. For more information on the IASB's standard, see Deloitte's January 13, 2016, [IFRS in Focus](#).

# Beyond the Bottom Line

This publication discusses select aspects of the final standard that are relevant to lessees and lessors in the oil and gas (O&G) industry. For a comprehensive overview of the standard, including illustrative examples, see Deloitte's March 1, 2016, [Heads Up](#).

## Overview of the New Standard

### Background

After working for almost a decade, the FASB has finally issued its new standard on accounting for leases, ASU 2016-02. The leases project's primary objective was to address the off-balance-sheet financing concerns related to lessees' operating leases. However, developing an approach that requires all operating leases to be recorded on the balance sheet proved to be no small task. The FASB and IASB had to grapple with matters such as (1) whether an arrangement is a service or a lease, (2) what amounts should be initially recorded on the lessee's balance sheet for the arrangement, (3) how to reflect the effects of leases in the statement of comprehensive income of a lessee (a point on which the FASB and IASB were unable to agree), and (4) how to apply the resulting accounting in a cost-effective manner.

Accordingly, the FASB's new standard introduces a lessee model that brings most leases onto the balance sheet. The standard also aligns certain underlying principles of the new lessor model with those in ASC 606, the FASB's new revenue recognition standard (e.g., those that help entities evaluate how collectibility should be considered and determine when profit can be recognized). The ASU also addresses other concerns related to the current leases model, which is almost 40 years old. For example, the new standard eliminates the requirement that entities use bright-line tests in current U.S. GAAP to determine lease classification. The standard also requires lessors to be more transparent about their exposure to risks regarding the changes in value of their residual assets and about how lessors manage that exposure.

The changes introduced by the new standard significantly affect entities in the O&G industry because of their extensive use of fixed assets under contracts that may qualify as leases under the new guidance. Agreements that O&G entities enter into are frequently customized and include services and other components critical to completing the contracts, especially in oilfield services arrangements. While under current guidance the accounting for operating leases is often similar to that for service contracts, this will no longer be the case under the new standard. The scoping of drilling contracts, oilfield services arrangements, etc., as either service or lease arrangements may determine whether they are reflected on or off the balance sheet under the new standard. Therefore, O&G entities will need to assess many service and lease contracts to determine whether such agreements meet, or have components that meet, the new definition of a lease.

### Scope

Like the scope under current requirements, the scope of the new guidance is limited to leases of property, plant, and equipment (PP&E). The scope excludes (1) leases of intangible assets; (2) leases to explore for or use minerals, oil, natural gas, and similar nonregenerative resources; (3) leases of biological assets; (4) leases of inventory; and (5) leases of assets under construction.



## Thinking It Through

Under the proposal issued by the boards in May 2013, the scope of the lease accounting guidance would have included inventory (e.g., spare parts and supplies) and construction work in progress (CWIP). However, constituents expressed concerns that if the proposed guidance had applied to CWIP, build-to-suit transactions (in which the customer is involved with the construction activity) may have been accounted for as leases. In response, the FASB revisited the scope of the guidance in late 2015 and decided to limit it to PP&E. However, the FASB also decided to include guidance on a lessee's control of an underlying asset that is being constructed before lease commencement. That is, if an O&G entity that is involved in the construction of PP&E it intends to lease is determined to control the asset during the construction period, it will be considered the owner of the CWIP for accounting purposes and will need to assess the arrangement under the new standard's sale-leaseback guidance once construction is complete.

## Definition of a Lease

### *Identified Asset*

The new standard defines a lease as “a contract, or part of a contract, that conveys the right to control the use of identified property, plant, or equipment (an identified asset) for a period of time in exchange for consideration.” Control is considered to exist if the customer has both of the following:

- The “right to obtain substantially all of the economic benefits from the use of [an identified] asset.”
- The “right to direct the use of the [identified] asset.”

The notion of an identified asset is mostly consistent with that in current U.S. GAAP and IFRSs. Under this concept, a leased asset must be identifiable either explicitly (e.g., by a serial number) or implicitly (e.g., the asset is the only one available to satisfy the lease contract). A specified asset could also be a physically distinct portion of a larger asset (e.g., one floor of a building). However, a capacity portion of a larger asset that is not physically distinct (e.g., a percentage of a natural gas pipeline's or storage facility's total capacity) will generally not be a specified asset unless that capacity portion reflects substantially all of the larger asset's overall capacity.

The evaluation of whether there is an identified asset depends on whether a supplier has a substantive substitution right throughout the period of use. Substitution rights are considered substantive if the supplier has the practical ability to substitute alternative assets throughout the period of use (i.e., the customer cannot prevent the supplier from doing so and alternative assets are readily available to, or can be quickly sourced by, the supplier) and the supplier would benefit economically from the substitution.

An entity must use significant judgment when determining whether a substitution right is substantive. The entity should consider the facts and circumstances at the inception of the contract and exclude from its assessment circumstances that are not likely to occur over the contract term. The entity should also consider the asset's physical location. For example, it is more likely that the supplier will benefit from the substitution right if the identified asset is located at the supplier's rather than at the customer's premises.

It may be difficult for a customer to determine whether the supplier's substitution right is substantive. For example, the customer may not know whether the substitution right gives

the supplier an economic benefit. A customer should presume that a substitution right is not substantive if it is impractical to prove otherwise.



### Thinking It Through

The requirement that a substitution would provide an economic benefit to the supplier is a higher threshold than that in current U.S. GAAP. Accordingly, we expect more arrangements to be subject to lease accounting by virtue of the new standard's changes to the evaluation of substitution rights.

## ***Convey the Right to Control the Use***

With regard to a customer's right to control the use of the identified asset, the definition of a lease under the new standard represents a significant change from current guidance. Under current U.S. GAAP, an entity's taking substantially all of the outputs of an identified asset was considered indicative of the customer's right to control the use of that asset if the pricing per unit in the arrangement was neither fixed nor market at the time of delivery. This is considered sufficiently representative of when an agreement transfers the economics of an asset to the customer, and thus of the customer's right to control the use of that asset (e.g., a gas supply agreement in which the customer purchases substantially all of the outputs of a gas production and treatment facility).

By contrast, the new standard aligns the assessment of whether a contract gives the customer the right to control the use of the specified asset with the concept of control developed as part of the FASB's and IASB's new revenue standard. Accordingly, a contract evaluated under the new standard is deemed to convey the right to control the use of an identified asset if the customer has both the right to direct, and obtain substantially all of the economic benefits from, the use of that asset. The right to direct the use of the specified asset will take into account whether the customer has the right to determine — or predetermine — how and for what purpose the asset is used. Economic benefits from the use of the specified asset will include its primary products and by-products or other economic benefits that the customer can realize in a transaction with a third party (e.g., natural gas liquids in wet gas).

## **Lessee Accounting Model**

### **Initial Measurement**

The initial measurement of a lease is based on a right-of-use (ROU) asset approach. Accordingly, once the standard is effective, **all** leases (finance and operating leases) other than those that qualify for the short-term lease exception must be recognized as of the lease commencement date on the lessee's balance sheet. A lessee will recognize a liability for its lease obligation, measured at the present value of the future lease payments (excluding variable payments based on usage or performance) and a corresponding asset representing its right to use the underlying asset over the lease term. The initial measurement of the ROU asset will also include (1) initial direct costs<sup>3</sup> (e.g., legal fees, consultant fees, commissions paid) that are directly attributable to negotiating and arranging the lease that would not have been incurred had the lease not been executed and (2) any lease payments made to the lessor before or as of the commencement of the lease. The ROU asset will be reduced for any lease incentives received by the lessee (i.e., consideration received from the lessor will reduce the ROU asset).

<sup>3</sup> The new model defines "initial direct costs" as those incremental costs "that would not have been incurred if the lease had not been obtained" (executed).

In addition to those payments that are directly specified in a lease agreement and fixed over the lease term, lease payments include variable lease payments that are considered in-substance fixed payments (e.g., when a variable payment includes a floor or a minimum amount, such as in certain day-rate payment structures). However, the fact that a variable lease payment is virtually certain (e.g., a predictable yet variable performance bonus that is awarded on the basis of the time frame in which a certain footage is drilled) does not make the payment in-substance fixed. Therefore, it will not be included in the determination of a lessee's lease obligation and ROU asset or a lessor's net investment in the lease.

## Subsequent Measurement

The FASB decided in the ASU to maintain a dual-model approach, in which a lessee classifies the lease on the basis of whether the control of the underlying asset is effectively transferred to the lessee (e.g., substantially all the risks and rewards incidental to ownership of the underlying asset are transferred to the lessee). Lessees will classify a lease as either a finance lease or an operating lease by using classification criteria similar to those in IAS 17.<sup>4</sup>



### Thinking It Through

The FASB adopted the dual-model approach on the premise that all leases are not created equal. That is, some leases are more akin to an alternate form of financing for the purchase of an asset, while others are truly the renting of the underlying property.

Lessees will classify a lease as a finance lease if any of the following criteria are met at the commencement of the lease:<sup>5</sup>

- "The lease transfers ownership of the underlying asset to the lessee by the end of the lease term."
- "The lease grants the lessee an option to purchase the underlying asset that the lessee is reasonably certain to exercise."
- "The lease term is for the major part of the remaining economic life of the underlying asset."<sup>6</sup>
- "The present value of the sum of the lease payments and any residual value guaranteed by the lessee . . . equals or exceeds substantially all of the fair value of the underlying asset."
- "The underlying asset is of such a specialized nature that it is expected to have no alternative use to the lessor at the end of the lease term."

An entity determines the lease classification at lease commencement and is not required to reassess its classification unless (1) the lease is subsequently modified and the modification is not accounted for as a separate contract or (2) there is a change in the lease term or a change in the assessment of the exercise of a purchase option.

<sup>4</sup> IAS 17, *Leases*.

<sup>5</sup> Quoted text is from ASC 842-10-25-2.

<sup>6</sup> The ASU provides an exception to this lease classification criterion for leases that commence "at or near the end" of the underlying asset's economic life. The ASU indicates that a lease that commences in the final 25 percent of an asset's economic life is at or near the end of the underlying asset's economic life.



### **Thinking It Through**

While the ASU's classification criteria are similar to those in IAS 17, they vary from the current requirements in U.S. GAAP (i.e., the specific quantitative thresholds have been removed, and a fifth criterion, which does not exist under ASC 840, has been added). As a result, a lease that would have been classified as an operating lease may be classified as a finance lease under the ASU. In addition, as a reasonable approach to assessing significance, an entity is permitted to use the bright-line thresholds that exist under ASC 840 when determining whether a lease will be classified as a finance lease.

An entity will also assess land and other elements in a real estate lease as separate lease components under the new standard unless the accounting result of doing so would be insignificant. This approach is also similar to current guidance under IFRSs but will reflect a change from that in U.S. GAAP, under which a lessee is required to account for land and buildings separately only when (1) the lease meets either the transfer-of-ownership or bargain-purchase-price classification criterion or (2) the fair value of the land is 25 percent or more of the total fair value of the leased property at lease inception. This change may result in more bifurcation of real estate leases into separate lease components and may affect the allocation of the lease payments to the various elements.

### ***Finance Leases***

For finance leases, the lessee will use the effective interest rate method to subsequently account for the lease liability. The lessee will amortize the ROU asset in a manner similar to that used for other nonfinancial assets; that is, the lessee will generally depreciate the ROU asset on a straight-line basis unless another systematic method is appropriate. Together, these expense components will result in a front-loaded expense profile similar to that of a capital lease arrangement under current U.S. GAAP. Entities will separately present the interest and amortization expenses in the income statement.

### ***Operating Leases***

For operating leases, the lessee will also use the effective interest rate method to subsequently account for the lease liability. However, the subsequent measurement of the ROU asset will be linked to the amount recognized as the lease liability (unless the ROU asset is impaired). Accordingly, the ROU asset will be measured as the lease liability adjusted by (1) any accrued or prepaid rents, (2) unamortized initial direct costs and lease incentives, and (3) impairments of the ROU asset. As a result, the total lease payments made over the lease term will be recognized as lease expense (presented as a single line item) on a straight-line basis unless another systematic method is more appropriate.

### ***Impairment***

Regardless of the lease classification, a lessee will subject the ROU asset to impairment testing in a manner consistent with that for other long-lived assets (i.e., in accordance with ASC 360). If the ROU asset for a lease classified as an operating lease is impaired, the lessee will amortize the remaining ROU asset under the subsequent measurement requirements for a finance lease — evenly over the remaining lease term unless another systematic method is appropriate. In addition, in periods after the impairment, a lessee will continue to present the ROU asset amortization and interest expense as a single line item.



## Thinking It Through

While the ASU discusses subsequent measurement of the ROU asset arising from an operating lease primarily from a balance sheet perspective, a simpler way to describe it would be from the viewpoint of the income statement. Essentially, the goal of operating lease accounting is to achieve a straight-line expense pattern over the term of the lease. Accordingly, an entity effectively takes into account the interest on the liability (i.e., the lease obligation consistently reflects the lessee's obligation on a discounted basis) and adjusts the amortization of the ROU asset to arrive at a constant expense amount. To achieve this, the entity first calculates the interest on the liability by using the discount rate for the lease and then deducts this amount from the required straight-line expense amount for the period (determined by taking total payments over the life of the lease, net of any lessor incentives, plus initial direct costs, divided by the lease term). This difference is simply "plugged" as amortization of the ROU asset to result in a straight-line expense for the period. By using this method, the entity recognizes a single operating lease expense rather than separate interest and amortization charges, although the effect on the lease liability and the ROU asset in the balance sheet reflects a bifurcated view of the expense. Note, however, that the periodic lease cost cannot be less than the calculated interest on the lease liability (i.e., the amortization of the ROU asset, or plug amount, cannot be negative).

## Lessor Accounting

After proposing various amendments to lessor accounting, the FASB ultimately decided to make only minor modifications to the current lessor model. The most significant changes align the profit recognition requirements under the lessor model with those under the FASB's new revenue recognition requirements and amend the lease classification criteria to be consistent with those for a lessee. Accordingly, the ASU requires a lessor to use the classification criteria discussed above to classify a lease, at its commencement, as a sales-type lease, direct financing lease, or operating lease:

- *Sales-type lease* — The lessee effectively gains control of the underlying asset. The lessor derecognizes the underlying asset and recognizes a net investment in the lease (which consists of the lease receivable and unguaranteed residual asset). Any resulting selling profit or loss is recognized at lease commencement. Initial direct costs are recognized as an expense at lease commencement unless there is no selling profit or loss. If there is no selling profit or loss, the initial direct costs are deferred and recognized over the lease term. In addition, the lessor recognizes interest income from the lease receivable over the lease term.

In a manner consistent with ASC 606, if collectibility of the lease payments plus the residual value guarantee is not probable, the lessor does not record a sale. That is, the lessor will not derecognize the underlying asset and will account for lease payments received as a deposit liability until (1) collectibility of those amounts becomes probable or (2) the contract has been terminated or the lessor has repossessed the underlying asset. Once collectibility of those amounts becomes probable, the lessor derecognizes the underlying asset and recognizes a net investment in the lease. If the contract has been terminated or the lessor has repossessed the underlying asset, the lessor derecognizes the deposit liability and recognizes a corresponding amount of lease income.

- *Direct financing lease* — The lessee does not effectively obtain control of the asset, but the lessor relinquishes control. This occurs if (1) the present value of the lease payments and any residual value guarantee (which could be provided entirely by a third party or consist of a lessee guarantee coupled with a third-party guarantee)<sup>7</sup>

<sup>7</sup> If the present value of lease payments plus a lessee-provided residual value guarantee represents substantially all of the fair value of the underlying asset, the lessor classifies the lease as a sales-type lease.

represents substantially all of the fair value of the underlying asset and (2) it is probable that the lessor would collect the lease payments and any amounts related to the residual value guarantee(s). The lessor derecognizes the underlying asset and recognizes a net investment in the lease (which consists of the lease receivable and unguaranteed residual asset). The lessor's profit and initial direct costs are deferred and amortized into income over the lease term. In addition, the lessor recognizes interest income from the lease receivable over the lease term.

- *Operating lease* — All other leases are operating leases. In a manner similar to current U.S. GAAP, the underlying asset remains on the lessor's balance sheet and is depreciated consistently with other owned assets. Income from an operating lease is recognized on a straight-line basis unless another systematic basis is more appropriate. Any initial direct costs (i.e., those that are incremental to the arrangement and would not have been incurred if the lease had not been obtained) are deferred and expensed over the lease term in a manner consistent with the way lease income is recognized.



### Thinking It Through

While the FASB's goal was to align lessor accounting with the new revenue guidance in ASC 606, an important distinction may affect oilfield service and drilling lessors. Under ASC 606, variable revenues are estimated and included in the transaction price, subject to a constraint. By contrast, under the new leases standard, variable lease payments would generally be excluded from the determination of a lessor's lease receivable. Accordingly, direct financing leases or sales-type leases that have a significant variable component may result in inception losses for the lessor if the lease receivable plus the unguaranteed residual asset is less than the net carrying value of the underlying asset being leased. For example, this could occur if payments on a direct financing or sales-type lease of gathering and processing assets are based entirely on the performance or use of the facility (i.e., 100 percent variable). Most constituents agree that this outcome does not faithfully represent the economics of these transactions. We are therefore considering other possible approaches to applying the new standard to such contracts, including the use of a negative discount rate, which would avoid the inception loss. We are also working with others in the profession, including industry groups, to develop proposed solutions for consideration by the FASB that would address the apparent disconnect between the accounting and the economic substance. Lessors affected by this issue should consult with their professional advisers and monitor developments during the ASU's implementation phase.

## Effective Date and Transition

The new guidance is effective for public business entities for annual periods beginning after December 15, 2018 (i.e., calendar periods beginning January 1, 2019), and interim periods therein. For all other entities, the ASU is effective for annual periods beginning after December 15, 2019 (i.e., calendar periods beginning January 1, 2020), and interim periods thereafter. Early adoption is permitted for all entities. Entities are required to apply a modified retrospective method of adoption, and the FASB has proposed several forms of transition relief that should significantly ease the burden of adoption.



### Thinking It Through

Under current U.S. GAAP, entities may adopt the new leases standard before they adopt the new revenue guidance (even though the new revenue standard has an earlier mandatory effective date). On the basis of our discussions with FASB staff, it is our understanding that such early adopters will be expected to apply the relevant new revenue guidance to the extent that it affects their lease accounting, and must wait to apply all other aspects of the new revenue standard until they have fully adopted that standard.

## Implications for O&G Entities

Agreements entered into by O&G entities frequently include service and other components critical to completing the contracts. The new definition of a lease is similar to the old definition in some respects but is different in others. In particular, the concept of the customer's right to control the use of an identified asset has been modified to achieve consistency with the new revenue standard.

### Drilling Contracts

Given the breadth of contract structures used in O&G exploration and production, O&G entities now need to increase their scrutiny of both onshore and offshore drilling contracts to determine whether such contracts are (or contain) leases under the new standard. The terms and conditions of drilling contracts are often complex and specifically negotiated, making it challenging for entities to determine the appropriate accounting under the new guidance. The determination of whether a well operator (i.e., a customer in a drilling contract) controls an identified rig in a drilling contract will dictate whether the arrangement is accounted for as a lease on the balance sheet or is treated as an off-balance-sheet service arrangement.

### ***Fulfillment of the Contract Depends on the Use of an Identified Asset***

Because of the nature of projects undertaken and the various logistical and technical complexities involved, specific rigs are often explicitly or implicitly identified in the terms of a drilling contract. Drilling contracts may also involve capital upgrade requirements that make it necessary for an independent contractor (i.e., a supplier in a drilling contract) to custom-fit a rig to meet an operator's unique drilling program needs. Accordingly, the fulfillment of a drilling contract will often depend on the use of a specified drilling rig that would meet the definition of an identified asset under the new standard.

### ***Right to Direct the Use of the Identified Asset***

A well operator has the right to direct the use of a specified drilling rig if it can determine how and for what purpose the asset is used. Further, the extent to which an operator determines how and for what purpose the specified rig is used will depend on whether the drilling contract grants the operator decision-making rights over that asset. Therefore, an operator should (1) identify the decision-making rights that most affect how and for what purpose the rig is used throughout the period of use (i.e., which decision-making rights most affect the economic benefits to be derived from the use of the rig) and (2) determine who controls those rights. If the decisions related to how and for what purpose the rig is used are predetermined (by contract or the nature of the asset), the assessment should focus on whether the operator (1) controls the drilling program or (2) designed the aspects of the rig that are most relevant to how and for what purpose it is used; meeting either criterion would be deemed to convey the right to direct the use of the identified asset to the operator.

The decision-making rights that most affect the economic benefits to be derived from a drilling rig are likely to differ depending on the type of drilling contract. The following table discusses decision-making rights that an operator may be granted in various types of drilling contracts and presents our current thinking on whether those rights determine how and for what purpose a specified onshore or offshore rig is used.

Type of Drilling Contract	Operator's Decision-Making Rights	Do the Operator's Decision-Making Rights Determine How and for What Purpose the Drilling Rig Is Used?
Turnkey	<p>Scenario A: The contractor retains all risks in drilling the well up to a contractually defined milestone (e.g., casing of the well). The contract specifies where the rig is to drill and the depth of the well. Upon reaching the predetermined milestone, the operator pays the contractor a lump sum and the contractor "turns over the key" of the well to the operator. That is, the well that is the subject of the turnkey contract is a ready asset (i.e., the drilling has been completed, the well has been cased, and the oil is ready to flow).</p>	<p>No. Decision-making rights that most affect the economic benefits to be derived from the use of the rig, and thus how and for what purpose the rig is used, either have been predetermined in the contract or remain with the contractor. Decisions about where the output is produced (i.e., where the rig will drill) and the quantity of the output produced (i.e., how many feet the rig will drill) have been predetermined in the contract. The contractor retains decision-making rights throughout the period of use about whether and, if so, when the rig will drill/produce output (i.e., the drilling program).</p>
	<p>Scenario B: Same as above, except the operator is required by the relevant regulatory authority to assume responsibility for blowouts, spills, and other risks.</p>	<p>It depends. If the operator is taking on greater risks in the residual asset of the rig (e.g., damage from a blowout), the operator may seek to increase its control over the management of those risks. That is, in return for taking on greater risks in the drilling of the well, the operator may structure the contract to provide more decision-making rights over how and for what purpose the rig is used.</p>
Footage	<p>Scenario A: The operator pays the contractor a contractually specified rate per foot drilled for a well. The contract specifies where the rig is to drill and the depth of the well.</p>	<p>No. Decision-making rights that most affect the economic benefits to be derived from the use of the rig, and thus how and for what purpose the rig is used, either have been predetermined in the contract or remain with the contractor. Decisions about where the output is produced (i.e., where the rig will drill) and the quantity of the output produced (i.e., how many feet the rig will drill) have been predetermined in the contract. The contractor retains decision-making rights throughout the period of use about whether and, if so, when the rig will drill/produce output (i.e., the drilling program).</p>

	Scenario B: The operator pays the contractor a contractually specified rate per foot drilled. Whether and, if so, where to drill or how much to drill (or both) within a contractually defined oilfield are determined by the operator. The contractor retains responsibility for operating and maintaining the rig.	Yes. The operator's decision-making rights provide the operator with the right to change, throughout its period of use, whether and, if so, where to drill or how much to drill (or both). These decision-making rights most affect the economic benefits to be derived from the rig and thus determine how and for what purpose the rig is used throughout the operator's period of use. Although operating and maintaining the rig are essential to its efficient use, decisions over those activities do not by themselves most affect how and for what purpose the rig is used; rather, they are subject to the operator's decision making rights related to how and for what purpose the rig is used.
Daywork	The operator pays the contractor a contractually specified rate per day of drilling. Rates may also be specified for nonworking days or for mobilization. The operator determines specific operating procedures (i.e., drilling program), including where the rig is to drill and how many feet the rig will drill. The contractor retains responsibility for operating and maintaining the rig.	Yes. The decision-making rights that most affect the economic benefits to be derived from the use of the rig, and thus how and for what purpose the rig is used, have been predetermined by the operator in the drilling program, which the contractor does not have the right to change throughout the period of use. Although operating and maintaining the rig are essential to its efficient use, decisions over those activities do not by themselves most affect how and for what purpose the rig is used; rather, they are subject to the operator's decision-making rights related to how and for what purpose the rig is used (i.e., subject to the drilling program).

Other important decision-making rights that affect the economic benefits to be derived from a drilling rig should also be considered in the assessment of whether the operator's decision-making rights most affect how and for what purpose the asset is used.

In all scenarios, O&G entities will need to evaluate on the basis of the specific facts and circumstances whether they have the right to determine how and for what purpose a specified drilling rig is used, and thus, the right to direct the use of the asset. O&G entities will need to use judgment when performing this evaluation.

## Transportation and Throughput Contracts

Existing contract structures to transport or store O&G products will need to be evaluated in the light of the new guidance's definition of a lease. Underlying assets that may be used to store or transport those products include the following:

- *Pipelines* — Current lease guidance does not necessarily preclude a percentage of a pipeline's transport or storage capacity from being subject to a lease. Under the new leases standard, however, a capacity portion of a larger asset that is not physically distinct (e.g., a percentage of a pipeline) will generally not be a specified asset. Therefore, a pipeline transportation contract that does not provide for the use of substantially all of the pipeline's capacity will not be considered an identified asset and will be outside the scope of the standard. Because pipeline contracts can be structured differently (e.g., as a percentage of capacity or specific reservation of a discrete pipeline), companies will have to review them to determine the appropriate accounting.

Companies should also be aware that the new standard specifically highlights by way of example that a pipeline lateral that is dedicated to one user is a distinct portion of a larger asset that would be considered an identified asset. On the surface, this

seems to capture any arrangements for transportation service that include dedicated stretches of service — most notably those involving infrastructure connecting a single customer (e.g., a gas-fired power plant) to the pipeline operator's main line. These are commonly called last-mile scenarios in reference to the connection to the customer site using infrastructure that is effectively dedicated. The lateral example that was included in the final ASU was never formally subject to public exposure. Accordingly, we anticipate further discussion between affected companies and the FASB to obtain clarity on the intent of the requirement and to understand its application to different fact patterns.

- *Vessels* — Waterborne transportation of liquid and gas products is addressed in many types of contracts, such as bareboat, time, and voyage charters. Such shipping contracts can take various forms, and their terms can differ significantly. For instance, bareboat charters may involve a specific vessel or a physically distinct portion of a vessel; time charters, on the other hand, may allow for substantive substitution of the vessel. In addition, the ability of the charterer-in to direct the use of a vessel may vary in a time or voyage charter, in which the vessel is operated by the charterer-out's crew. The new standard includes implementation guidance indicating that a time charter contains a lease and a voyage charter does not. Because contracts for the right to use a vessel could be considered to constitute or contain leases under the new guidance, O&G entities (including their marketing arms) will need to evaluate such contracts to determine the appropriate accounting.
- *Railcars* — The use of railcars to transport or store O&G products will remain important as infrastructure in the United States, Canada, and other countries continues to develop. Contracts involving railcars (e.g., those that involve the transport of light sweet crude from the Bakken shale formation to refiners on the East Coast of the United States) may be considered leases under the new guidance but may also constitute service agreements. This determination will depend on the extent of the freight supplier's (1) involvement in directing the use of the railcars and (2) ability to substitute identified railcars under the contract. The appropriate accounting for such contracts will be heavily based on their specific terms in the agreement. The new standard contains examples in its implementation guidance to help O&G entities apply the definition of a lease to contracts for railcars. In addition, the new standard allows companies to apply the guidance at a portfolio level, which could give relief to O&G companies that lease a large number of railcars. The portfolio approach can be applied if the resulting accounting would not be significantly different from that achieved when they apply the guidance on an individual-lease basis.
- *Refinery or processing facility* — An O&G entity may enter into a refining or processing agreement that gives it the right to toll crude or other feed stock (e.g., wet gas) through an identified refinery or processing or fractionation facility for conversion into refined products (e.g., jet fuel, gasoline, diesel; or ethane, dry gas). Depending on the terms of the contract, an O&G entity's tolling or throughput rights may indicate that it has the right to direct when and whether the refined products are produced by the refinery. That is, unless the O&G entity provides the feed stock, there is nothing to refine. If an O&G entity determines that those decision-making rights most affect the economic benefits to be derived from the refinery, the O&G entity will have the right to direct how and for what purpose the refinery is used. As a result, an O&G entity that also obtains substantially all of the refined products of that refinery (i.e., its economic benefits) may conclude that it has entered into a lease of the refinery.



## Thinking It Through

Questions have arisen about the scope of the new standard and whether easements and rights-of-way would or could be within the scope of the standard. These questions are often based on the notion that these arrangements are intangibles and would therefore be automatically excluded from the scope of the standard. We do not believe that these arrangements are automatically excluded from the scope of the standard; rather, we believe that they would require analysis to determine whether they represent leases. We expect that this analysis will often come down to the economic benefits test and an analysis of whether the easement holder has exclusive use of the property in question. For example, in an arrangement in which a company is allowed to run transportation infrastructure through a farmer's fields, it will be important to understand if the farmer can still use the acreage that lies over or under the infrastructure. If so, we would generally expect the easement holder to conclude that he or she does not receive substantially all of the economic benefits of the land and therefore that he or she does not have a lease. Given the volume of easements and rights-of-way held by some O&G companies, we recommend segregating these arrangements on the basis of similar terms and investigating the rights retained by the landowner as a starting point to the analysis.

## Joint Operating Agreements

O&G entities often enter into joint operating agreements (JOAs), in which two or more parties (i.e., operators and nonoperators) collaboratively explore for and develop oil or natural gas properties, using the experience and resources of each party. These agreements often require the use of leased equipment. Questions have arisen regarding the lease assessment requirements under the new standard for parties to JOAs. While we expect that the analysis of JOAs will be very much based on facts and circumstances, the following high-level example and analysis should be helpful as companies consider these arrangements:

### Example

Three companies, A, B, and C, form a JOA for the purpose of executing an offshore drilling program. To fulfill the JOA's objective, a specific asset (e.g., a drill rig) will be necessary. Company A will act as the counterparty to major contracts of the JOA, including a five-year contract to lease a specific drilling rig from its owner (Lessor X).

*Question 1: Which party, if any, is leasing the rig?*

Given A's role as primary obligor in the drilling rig's lease (the rig's owner may not be aware of the JOA and the parties that constitute it), A will generally be deemed the lessee in the arrangement. Accordingly, A will record the entire lease on its balance sheet. Even though other parties will receive economic benefits from the rig, those benefits arise from the JOA and do not affect the economic benefits analysis\* of the contract between A and the rig's owner, X.

*Question 2: What is the effect of the JOA?*

The JOA's terms may represent a sublease of the rig from A to the JOA. That is, the new standard requires the parties to the JOA to consider the terms and determine whether the JOA is a "virtual" lessee of the rig. Although the JOA is typically not a legal entity that prepares financial statements, a conclusion that the JOA is a lessee of the rig would have the following implications:

- Company A, as sublessor, would separately account for its sublease to the JOA (apart from its "head" lease with X, the rig's owner).
- Each party to the JOA would need to consider other GAAP (e.g., proportionate consolidation guidance) that may require it to record its pro rata portion of the lease (as a lessee).

\* To control the use of an identified asset under ASC 842, a customer is required to have the right to obtain substantially all of the economic benefits from the use of the asset throughout the period of use.

JOA accounting continues to be the subject of debate between companies and auditors, and we would encourage entities affected by this issue to check with their professional advisers for input on the accounting for specific arrangements.

## Implementation Considerations

The ASU may present significant implementation challenges for entities during the period of transition and beyond, including the following:

- Evaluating new requirements that will involve the use of significant judgment, including estimations related to recognition on the balance sheet.
- Managing the complexities of data collection, storage, and maintenance for a potentially large population of contracts.
- Enhancing information technology systems to perform the necessary calculations and reporting requirements.
- Refining internal controls and other business processes related to identification and capture of contracts subject to lease accounting and new disclosure requirements.
- Determining whether debt covenants will be affected and, if so, working with lenders to avoid violations.
- Identifying and addressing income tax effects.

## Application of Judgment and Estimation

Entities will be required to apply judgment and make estimates under a number of the new (as well as current) leases requirements. Judgment is often required in the assessment of the lease term, which will affect whether the lease qualifies for the short-term exemption and therefore for off-balance-sheet treatment. In addition, an entity's judgment in distinguishing between leases and services becomes more critical under the new guidance, since almost all leases will be recognized on the balance sheet.



### Thinking It Through

In particular, upon transition, O&G entities will need to recognize ROU assets and lease obligations by using an appropriate discount rate on the date of transition. Compliance with this requirement may be difficult for O&G entities with a significant number of leases, since they will need to identify the appropriate incremental borrowing rate for each lease on the basis of factors associated with the underlying lease terms (e.g., lease tenor, asset type, residual value guarantees). In other words, O&G entities will not be permitted to use the same discount rate for all of their leases unless the leased assets and related terms are similar.

## Data Management

O&G entities may have numerous lease agreements across multiple decentralized locations, and in many instances, the lease data are maintained in spreadsheets or physical documents. As a result, collecting and abstracting data may be time-consuming and resource-intensive and may represent a longer lead-time activity for O&G entities with higher lease volumes. Further, O&G entities may have certain elements of lease data in an electronic format; however, such data may not have been subjected to internal control procedures under the Sarbanes-Oxley Act of 2002, may reside in disparate systems, and are likely to be incomplete when the entity is considering the accounting and reporting requirements of the new standard. An entity may find that a centralized information repository is critical to the development of a complete inventory of leases.

In addition, the ASU requires information that existing lease agreements may not include, which may result in O&G entities' having to collect other lease-related documents to ensure completeness of data. For example, O&G entities will typically need to look beyond the lease agreement to capture (1) the fair value of the asset, (2) the asset's estimated useful life, (3) the discount rate (e.g., the incremental borrowing rate), and (4) certain judgments related to lease options. This will be particularly challenging for multinational O&G entities whose lease documentation may be prepared in a foreign language and could also vary because of local business practices.

As O&G entities identify and collect the necessary data to comply with the requirements in the ASU, the entities should also consider the challenges of ongoing data maintenance. The data gathering and abstraction effort may take many months to complete, all while new leases are executed and other leases are renewed, modified, or terminated. Accordingly, management will need to establish an approach to data maintenance and control during the implementation period and beyond.

Given the relationship between lease maturity disclosures under the current guidance and the lease liabilities that will be recognized on adoption of the ASU (and will be subject to modified retrospective transition, which will affect 2017 financial reporting), we believe that in preparing their December 31, 2016, financial statements, O&G entities should strive to ensure that they have identified a complete population of leases.

### **Information Technology Systems**

O&G entities may need to make changes to their information technology systems to implement the ASU's requirements. The extent of such changes will be based on the size and complexity of the O&G entity's lease portfolio and its existing leasing systems. As with any changes to existing systems, an O&G entity will need to consider its business requirements (i.e., the potential impact on existing processes, systems, and controls) and the requirements of system users (e.g., the entity's legal, tax, financial planning and analysis, real estate, treasury, and financial reporting functions).

Also, management may need to consider system changes that will enable an O&G entity to estimate, before adoption, the ASU's effect on key performance indicators and metrics, tax filings, debt covenants, or other filings. Finally, to the extent that an O&G entity prepares IFRS statutory reports for foreign subsidiaries, its system capabilities will need to distinguish between ASC 842 and IFRS 16 and be equipped to handle the differences between the two standards.

### **Internal Controls and Business Process Environment**

Existing systems with lease data are typically used primarily for operational purposes, and thus some aspects of the related internal controls may not meet the internal control requirements of the Sarbanes-Oxley Act of 2002. Given the increased relevance of the leasing data to the financial statements under the ASU, O&G entities may face increased scrutiny from auditors and regulators regarding the design and effectiveness of associated controls. Accordingly, O&G entities will need to examine internal controls related to their processes for capturing, calculating, accounting for, and disclosing information about their leases. If additional internal controls and processes are needed, O&G entities may also need to issue organizational communications and establish change management and employee training programs.

Finally, as part of the effort to implement the standard, O&G entities may identify potential enhancements to current processes to achieve operational efficiencies. For example, O&G

entities may seek to automate manually intensive processes or consider organizational changes such as a shared services model.

## Debt Covenants

Given the requirement to bring most leases onto the balance sheet, many O&G entities will reflect additional liabilities on their balance sheets after adopting the ASU. Such entities should determine whether the increased leverage will negatively affect any key metrics or potentially cause debt covenant violations. This may depend in part on how various debt agreements define and limit indebtedness as well as on whether the debt agreements use “frozen GAAP” covenants. The ASU requires entities to present operating lease liabilities outside traditional debt, which may provide relief for some entities. Regardless, we believe that it will be critical for all O&G entities to determine the ASU’s potential effects on debt covenants and begin discussions with lenders early if they believe that violations are likely to occur as a result of adopting the ASU.

## Income Taxes

A lease’s classification for accounting purposes does not affect its classification for tax purposes. An O&G entity will therefore continue to be required to determine the tax classification of a lease under the applicable tax laws. While the classification may be similar for either purpose, the differences in tax and accounting principles and guidance often result in book/tax differences. Thus, once an O&G entity implements the new standard, it will need to establish a process to account for these differences.

The ASU’s requirement for O&G entities to reevaluate their leases under the new guidance presents an opportunity for them also to reassess the tax treatment of such leases as well as their data collection and processes. Since the IRS considers a taxpayer’s tax treatment of leases to be a method of accounting, any changes to existing methods may require IRS consent.

O&G entities should also consider the potential state tax issues that may arise as a result of the new guidance, including how the classification of the ROU asset may affect the apportionment formula in the determination of state taxable income and how the significant increase in recorded lease assets could affect the determination of franchise tax payable.



### Thinking It Through

Since the potential tax implications are many and varied, it is essential for an O&G entity’s tax department to be involved in the evaluation of the leases standard as well as in discussions related to policy adoption and system modifications.

## Getting Started

O&G entities should develop a robust plan and establish a cross-functional implementation team to ensure an efficient and timely approach to implementation. In developing such a plan, they should consider doing the following:

- Performing a current-state assessment of their lease portfolio, including lease volumes and types, availability of electronic lease data and data gaps, and any potential changes related to accounting, taxes, or processes.
- Establishing a granular project plan and road map to manage the effort across multiple functions, business units, and countries, as necessary.
- Developing an approach to, and the resources to perform, the abstraction of the lease data.

- Determining their specific system requirements and developing a plan for enhancing system capabilities to satisfy the new storage, calculation, and reporting requirements while keeping in mind the associated internal control implications.
- Assessing the ASU's effect on their key metrics and debt covenants.

Time is truly of the essence. As the effective date approaches (i.e., January 1, 2019, for public entities and January 1, 2020, for all other entities), the most important action an O&G entity can take is to start the efforts related to this accounting change now. It can be a challenge to anticipate the data gaps and overcome the data abstraction hurdle, but with adequate support and sufficient time, it can be achieved. By planning properly, O&G entities can help ensure that their transition to the new leases standard is smooth and successful.

## How Deloitte Can Help

### Deloitte Expertise

Deloitte professionals both in the United States and globally across the member firms of Deloitte Touche Tohmatsu Limited are equipped with the latest tools and technology to help you develop and execute an action plan for implementing the new standard.

Our services include help with accounting interpretations, process revisions, system changes (including development of system business requirements), new system implementations, and tax analysis. Specific areas of assistance include but are not limited to:

- *Contract assessment* — Reviewing existing contracts to determine the new standard's effect.
- *Data challenges* — Gathering data from various locations (both physical contracts and system information) and creating a standardized gathering framework.
- *Process challenges* — Implementing a standardized process for consistent reporting and application throughout an entity.

### Deloitte Tools

Deloitte has developed a suite of user-friendly, Web-based tools to help O&G entities maintain lease data and perform lease calculations under the new standard. These tools can help you automate the process of analyzing and abstracting lease contracts; manage a centralized, secure repository; and identify and address key data deficiencies associated with leases.

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