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Project	<b>Leases</b>
Topic	<b>Definition of Interest Rate Implicit in the Lease</b>

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## Purpose

1. The purpose of this memorandum is to develop a definition for the *interest rate implicit in the lease* that would be consistent with the proposed right-of-use model.
2. The paper is structured as follows:
  - (a) Background
  - (b) Analysis of Current Guidance
  - (c) Potential Approaches
  - (d) Staff Recommendation
3. In this paper, the staff recommends setting out a principle for determining the appropriate discount rate for the lessor to use to present value rental payments.

## Background

4. At their December 2009 joint meeting, the boards questioned whether the definition of the *interest rate implicit in the lease* (as currently defined) would be operational under a right-of-use model.
5. The Master Glossary of the *FASB Accounting Standards Codification*<sup>TM</sup> defines *interest rate implicit in the lease* as follows:

The discount rate that causes the aggregate present value at the beginning of the lease term of the minimum lease payments..., excluding that portion of the payments representing executory costs to be paid by the lessor, together with any profit thereon and the unguaranteed residual value, accruing to the benefit of the lessor to be equal to the fair value of the leased property to the lessor at lease inception, minus any investment tax credit retained by the lessor and expected to be realized.

6. Simply stated, the implicit rate in the lease is the rate that causes the present value of cash flows to equal the fair value of the leased asset (the internal rate of return on the lease).
7. Paragraph 4 of IAS 17, *Leases*, defines the interest rate implicit in the lease as follows:

...the discount rate that, at the inception of the lease, causes the aggregate present value of (a) the minimum lease payments and (b) the unguaranteed residual value to be equal to the sum of (i) the fair value of the leased asset and (ii) any initial direct costs of the lessor.
8. In theory, the interest rate implicit in the lease should equal the lessee's incremental borrowing rate. However, the implicit rate is affected by differences between the lessee's and lessor's estimates of the residual value, and it also may be affected by other factors only known to the lessor. As such, it may be difficult to determine the implicit rate for some leases (particularly those leases that have significant residual values at the end of the lease, such as leases currently classified as operating leases).

### **Analysis of Current Guidance**

9. The staff has identified the following components of the current definition of the interest rate implicit in the lease as those that may cause potential issues in applying the implicit rate, as currently defined, to a lease under the right-of-use model:
  - (a) Determining the fair value of the leased asset
  - (b) Determining the unguaranteed residual value
  - (c) Using the term *minimum lease payments*.

***Determining the fair value of the leased asset***

10. One component of the current definition of the interest rate implicit in the lease is the calculation of the fair value of the leased asset. The *fair value of leased property* is defined in the Master Glossary of the Accounting Standards Codification as follows:

The price for which the property could be sold in an arm's-length transaction between unrelated parties.

11. Similarly, paragraph 4 of IAS 17 defines *fair value* as follows:

...the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction

12. Under current leases guidance, the interest rate implicit in the lease is only used for those leases currently classified as capital (finance) leases. In those circumstances, the leased asset (property) is accounted for as if it has been sold/purchased (transferred). Hence, the interest rate implicit in the lease is trying to equate the rental payments and the unguaranteed residual value to the fair value of the underlying asset that was transferred.
13. Under the right-of-use model, there is no transfer of the underlying asset (leased item). An intangible asset is recognized by the lessee, which represents the lessee's right to use the leased item over the lease term (the right-of-use asset). For example, in the Discussion Paper, *Leases: Preliminary Views*, the boards stated that the fair value of a building (the underlying asset) is different from the fair value of the right to use the sixth floor of the building for 15 years.
14. As such, the staff questions the relevance of the fair value of the underlying asset under a right-of-use model and whether that notion should be included in the definition of the interest rate implicit in the lease.

***Determining the unguaranteed residual value***

15. A second component of the current definition of the interest rate implicit in the lease is the determination of the unguaranteed residual value. The Master

Glossary of the Accounting Standards Codification defines the *unguaranteed residual value* as follows:

The estimated residual value of the leased property exclusive of any portion guaranteed by the lessee or by a third party unrelated to the lessor. A guarantee by a third party related to the lessee shall be considered a lessee guarantee. If the guarantor is related to the lessor, the residual value shall be considered as unguaranteed.

16. Similarly, paragraph 4 of IAS 17 defines *unguaranteed residual value* as:

That portion of the residual value of the leased asset, the realisation of which by the lessor is not assured or is guaranteed solely by a party related to the lessor.

17. Under the right-of-use model, the right-of-use asset is different and separate from the underlying asset. As such, it may not be appropriate to use the unguaranteed residual value of the underlying asset in the determination of the interest rate implicit in the lease under the proposed new model because the lessee is not acquiring the underlying asset; it is acquiring a temporary right to use the underlying asset.

18. Furthermore, the unguaranteed residual value of the underlying asset will vary depending on the nature of the lease. For example, those leases currently accounted for as operating leases will have a much larger residual value and thus will have a greater effect on the interest rate implicit in the lease. That increases subjectivity in determining the residual value because the value at the end of the lease term is less determinable than the lease payments. Members of the leases working group noted circumstances such as when one floor of an office building is under lease as examples of when a determination in the value of the remaining underlying asset is less reliable.

***Using the term minimum lease payments***

19. The current definition of the *interest rate implicit in the lease* requires a calculation of the *minimum lease payments*.

20. Under the right-of-use model, the boards changed the notion of the term *minimum lease payments* to lease payments that would include contractual lease

payments as well as other payments expected to be paid such as payments for optional periods, contingent rental arrangements, and residual value guarantees.

21. Therefore, the staff questions whether it is appropriate to include the term *minimum lease payments* within the definition of the *interest rate implicit in the lease* under the proposed new leases requirements.

### Potential Approaches

22. The staff identified the following approaches to defining the *interest rate implicit in a lease* within the proposed new leases requirements:

(a) Approach A

The rate that makes the present value of the rental payments, plus the present value of the unguaranteed residual value of the underlying asset at the end of the lease term, equal to the fair value of the underlying leased asset.

(b) Approach B

The rate that makes the present value of the rental payments equal to the fair value of the right-of-use asset.

(c) Approach C

Set out a principle for determining the appropriate discount rate for the lessor to use to present value the rental payments.

### Approach A

23. Approach A retains the current definition and defines the interest rate implicit in the lease as follows:

The discount rate that, at the inception of the lease, causes the aggregate present value of (a) the lease payments and (b) the unguaranteed residual value to be equal to the sum of (i) the fair value of the leased asset and (ii) any initial direct costs of the lessor.

24. Some constituents think the definition in Approach A more accurately reflects the economics inherent in a lease arrangement because it takes into account all the benefits accruing to the lessor over the lease term (i.e. both payments and the residual).

25. Furthermore, proponents of this approach think that the interest rate implicit in the lease reflects the lessor's internal rate of return in an arrangement. This approach implies that the underlying leased asset is representative of the initial cash outlay for which the return is attributed to.
26. This notion is currently used in practice by lessors for capital lease arrangements. They note that the economics of the transaction are not altered by the proposed change in lease accounting guidance. As such, there should not be a corresponding change to the definition of the interest rate implicit in the lease.
27. Although this calculation would be practicable for many leases, some do not think that the fair value of the underlying asset is relevant to the interest rate implicit in the lease under the right-of-use model because the lessee is not acquiring the underlying asset itself. Therefore, some view this approach as conceptually inconsistent with the right-of-use model.
28. In addition, the rate calculated under this approach would have little relevance to the business model of certain lessors. One working group member noted that lease payments of certain leases are market driven and, therefore, are not focused on the interest rate implicit in the lease. Rather, the economics of the lease more readily reflect the extension of a loan for the lessee's right to use the underlying asset. Hence, the rate used in the lease is more likely attributable to the lessee's incremental borrowing rate.

**Approach B**

29. Approach B would define the interest rate implicit in the lease as follows:

The discount rate that, at the inception of the lease, causes the aggregate present value of the lease payments to be equal to the fair value of the right-of-use asset.
30. Approach B acknowledges that the interest rate implicit in the lease under the right-of-use model has little to do with the fair value of the underlying asset. Rather, the interest rate implicit in a lease should be defined as the rate that makes the present value of the lease payments equal to the fair value of the right-of-use asset. This approach is more conceptually consistent with the right-of-use model.

31. A disadvantage to this approach is the difficulty in determining the fair value of the right-of-use asset. In the Discussion Paper on leases, the boards discussed measuring the right-of-use asset initially at fair value. The boards tentatively decided that the lessee should initially measure its right-of-use asset at cost, noting that comparability would be decreased between entities and that a cost-based measurement would reflect consistency with the measurement of other non-financial assets. Moreover, the boards noted that a cost-based approach is simpler and less costly for preparers to apply than requiring fair value measurement. The boards re-confirmed the notion regarding initial measurement of the right-to-use asset at the November 2009 joint board meeting.
32. Approach B presents significant issues regarding whether the definition of the interest rate implicit in a lease is operational. For example, in many leases, the only way to determine the fair value of the right-of-use asset is to use a discounted cash flow technique. Some working group members asserted that absent a developed market, one would be required to determine which rate is used in the discounted cash flow assessment. The appropriate rate used in a discounted cash flow assessment to determine the fair value of the right-of-use asset would be difficult to obtain because the lessor would likely be required develop an appropriate rate based on the entity's weighted-average cost of capital. Working group members noted that this rate would increase complexity and often be subjective, thus, decreasing comparability amongst entities.
33. Furthermore, working group members noted that in doing so, the determination of the interest rate implicit in the lease may become circular because the rate to use in determining the fair value of the right-of-use asset could theoretically be identical to the interest rate implicit in the lease. One constituent commented:

This is an impossible calculation and a logical inconsistency. Given that there is no observable market for right-of-use assets and the ROU asset is defined as the present value of the rentals at a certain rate, then one can't use the value of the right-of-use asset to calculate that same rate...

**Approach C**

34. Approach C acknowledges the following:

- (a) Retaining the current definition of the interest rate implicit in the lease (Approach A) is inconsistent with the right-of-use model for most leases, and
- (b) While Approach B is conceptually consistent with the right-of-use model, it may not be operational.

35. Therefore, Approach C proposes a principle to determine the rate the lessor would use to discount the lease payments rather than a definition prescribing how to determine the rate, which may not be practicable in all circumstances.

36. As such, Approach C would reflect the basis for determining an appropriate interest rate depending on the differences in lessors' business models.

37. The principle for determining the discount rate would be the following:

The discount rate that should be used to present value the lease payments is the rate that the lessor is charging the lessee.

38. Under a right-of-use model, the lessor is transferring the right to use its underlying asset to the lessee for consideration. That model treats the consideration as the lessor providing a loan to the lessee. Therefore, it would seem appropriate to use a discount rate that reflects the rate of return that the lessor expects to achieve on the lease.

39. In those situations, the use of the lessee's incremental borrowing rate may be appropriate. Similar to a rate used for a loan arrangement, the rate would reflect market conditions surrounding the lease arrangement and also would consider the credit worthiness of the lessee.

40. In other lease arrangements, the level of necessary financing when the lessor obtained the fixed asset may be attributable to determining the appropriate interest rate in a lease arrangement. Under this approach, the factors that contribute to the rate that the lessor is charging the lessee should be accounted for in the determination of the interest rate used to discount lease payments. In those arrangements, the interest rate may be more attributable to the underlying leased asset. Hence, Approach A may more accurately reflect the economics inherent in the arrangement.



41. Finally, Approach C would not preclude using Approach B if the fair value of the right-of-use asset could be readily determined and if that calculation would provide the best indication of the rate being charged by the lessor to the lessee.

### Staff Recommendation

42. The staff thinks that the conceptually correct answer is Approach B. That is, the interest rate implicit in a lease arrangement is the rate that causes the present value of the lease payments to equal the fair value of the right-of-use asset.
43. However, the staff is concerned with the operationality of Approach B and, thus, recommends Approach C, which is to set out the following principle for determining the appropriate discount rate for the lessor to use to present value the rental payments:

The discount rate that should be used to present value the lease payments is the rate that the lessor is charging the lessee.

#### Question 1

Question 1 – The staff recommend setting out the following principle for determining the appropriate discount rate for the lessor to use to present value the rental payments:

The discount rate that should be used to present value the lease payments is the rate that the lessor is charging the lessee.

Do the boards agree?