Objective

1. The objective of this paper is to confirm the methodology for subsequent recognition and measurement of an other-than-finance lease in the financial statements of a lessee.

Background

2. This paper follows from the discussion at the April 2011 joint meeting that addressed and provided tentative decisions on the following topics:

   (a) *Is more than one accounting approach necessary?* (Agenda paper 1F / FASB Memo 160) – Yes, there should be two accounting approaches for leases for both lessees and lessors.

   (b) *Determining a lease to be a finance lease or other-than-finance lease* (Agenda paper 1G / FASB Memo 161) – Both lessees and lessors should use guidance similar to that in IAS 17 *Leases* to determine which accounting approach to apply.

   (c) *Lessee Accounting – other-than-finance lease.* (Agenda paper 1H / FASB Memo 162) -

      (i) For both lessee accounting approaches, the

Boards affirmed their proposals in the leases Exposure Draft that a lessee would:

- Initially recognize a liability to make lease payments and a right-of-use asset, both initially measured at the present value of lease payments.
- Subsequently measure the liability to make lease payments using the effective interest method.

(ii) For finance leases, a lessee would, consistent with the proposals in the exposure draft:

- Amortize the right-of-use asset on a systematic basis that reflects the pattern of consumption of the expected future economic benefits in accordance with IAS 38 *Intangible Assets* and Topic 350 *Intangibles – Goodwill and Other*.
- Present separately amortization of the right-of-use asset and interest expense on the liability to make lease payments, either in profit or loss or in the notes.

(iii) For other-than-finance leases, a lessee would:

- Amortize the right-of-use asset in a manner which would result in total lease expense (representing the sum of amortization of the right-of-use asset and interest expense on the liability to make lease payments) being recognized over the lease term on a straight-line basis unless another systematic basis is more representative of the time pattern of the total lease expense.
- Present amortization of the right-of-use asset and interest expense on the liability to make lease payments together as a single line item within operating expense (for example, as rent expense).

3. This paper is organized as follows:

(a) Staff recommendation

(b) Staff analysis and recommendation

(c) Appendix A – Excel spreadsheet illustrating the example with supporting calculations.

Staff recommendation

4. The staff recommends that the Boards affirm the tentative decision that for an other-than-finance lease the lessee would amortize the right-of-use asset in a manner which would result in total lease expense (representing the sum of amortization/depreciation of the right-of-use asset and interest expense on the liability to make lease payments) being recognized over the lease term on a straight-line basis unless another systematic basis is more representative of the time pattern of the total lease expense.

5. In order to achieve this expense pattern, the staff recommends a modified annuity approach as described in Approach A, below. Additionally, the staff recommends the final standard include the following guidance describing the methodology:

> A lessee in an other-than-finance lease should allocate the total consideration paid in a lease, including the amount attributable to interest expense on the liability to make lease payments, to each period during the lease term in proportion to the benefit expected from the leased asset in that period, typically on a straight-line basis unless another systematic and rational basis more appropriately reflects the pattern of expense.

Staff analysis and recommendation

6. During the April 2011 joint meeting the Boards discussed and voted in favor of an approach for the subsequent recognition and measurement of an other-than-finance lease by lessees that was not specifically outlined in the staff's previous paper.

7. This memo will compare and contrast the Boards' preferred approach, which in this memo will be referred to as the modified annuity approach, and the annuity-based amortization approach, which was the majority staff's original recommendation in Agenda paper 1H / FASB Memo 162 from the April 2011 joint meeting.

8. The following example will be used to illustrate the approaches.

> A lessee enters into a 10-year lease that requires payments at the beginning of each year. Upon signing the lease and on the first anniversary of signing the lease, the lessee is required to pay 100 currency units (CU). In the following four years the lessee is required to pay CU125 and the final four years the lessee is required to pay CU150.
>
> The rate the lessee is charged in the lease is 7 percent and there are no initial direct costs.

Approach A – Modified Annuity Approach

9. During the April 2011 joint meeting some Board members expressed a preference for an alternative approach for other-than-finance leases. This alternative approach was described as one in which the expense pattern is always straight-line, assuming an even pattern of benefit consumption. A view commonly expressed in support of such an approach is that that the lease contract is a single unit of account. Therefore, consistent with initial measurement, the subsequent measurement of the lessee's liability and asset should be linked throughout the lease term.

10. The recorded expense is a result of two components:

    (a) an interest component calculated using the effective interest method on the liability to make lease payments, and

    (b) an amortization/depreciation component calculated as the total benefit used in the period less the interest component. The total benefit used in the period for the modified annuity method is calculated without consideration of time-value. As a result, a straight-line expense pattern is achieved over the lease term (assuming a constant rate of benefit consumption).

11. The staff recommends that if the Boards affirm their tentative decision and use this approach, the standard should not be overly prescriptive in methodology. Specifically, the staff recommends the following guidance be included for the recognition of the lessee's expense in an other-than-finance lease:

> A lessee in an other-than-finance lease should allocate the total consideration paid in a lease, including the amount attributable to interest expense on the liability to make lease payments, to each period during the lease term in proportion to the benefit expected from the leased asset in that period, typically on a straight-line basis unless another systematic and rational basis more appropriately reflects the pattern of expense.

12. Using the example in paragraph 8 of this paper, the staff thinks the following will be the resulting practice.

    (a) First, the entity will create a payment schedule to calculate the initial liability to make lease payments and the ROU asset consistent with the proposals in the ED and the tentative decision for finance leases. The net present value of future lease payments is CU 951 which is recorded as a liability and asset at commencement of the lease.

    (b) Next, the entity will calculate the total amount of expected payments to occur over the lease term. In our example, the lessee expects to pay CU 1,300. Additionally, the entity would assess the expected pattern of consumption of benefits over the lease term. In the example, the lessee expects to consume the benefits evenly over the lease term therefore the pattern of benefits is established as CU 130 per year (total consideration to be paid of CU 1,300 divided by 10 years). As a result, the expense to be recognized each year will be CU 130.

    (c) At the end of Year 1 the entity would calculate:

        (i) An interest component consistent with the ED proposals. In the example, because a payment was made at commencement of the lease, the liability outstanding for the year is CU 851. Hence, using the rate of 7 percent an expense of CU 60 is calculated.

        (ii) An amortization component of CU 70 being the difference between the expense to be recognized of CU 130 and the interest component of CU 60.

13. Supporters of Approach A would describe the amortization/depreciation calculation to be a modified annuity-based amortization because this approach calculates interest based on the recorded liability rather than on the recorded ROU asset, which would be normally characteristic of an annuity based

approach (see Approach B). As a result a straight-line method of expense recognition is achieved throughout the term of the lease.

14. The table below illustrates the example through all periods of the lease.

	FINANCIAL POSITION				PROFIT OR LOSS		
Period	**Cash Payment**	**Pattern of Benefits**	**ROU Asset**	**Lease Obligation**	**Amort/Depr Expense**	**Interest Expense**	**Total Lease Expense**
Inception			951	(951)			
Day 1	100		951	(851)			**[A]**
1	100	130	881	(811)	70	60	130
2	125	130	808	(743)	73	57	130
3	125	130	730	(670)	78	52	130
4	125	130	647	(592)	83	47	130
5	125	130	558	(508)	89	41	130
6	150	130	464	(394)	94	36	130
7	150	130	361	(271)	102	28	130
8	150	130	250	(140)	111	19	130
9	150	130	130	0	120	10	130
10		130	(0)	n/a	130	(0)	130
TOTAL	**1,300**				**951**	**349**	**1,300**

[A] - Consistent with the Boards' tentative decision in the April 2011 joint meeting only total lease expense would be required to be presented. Amortization/depreciation expense and interest expense are displayed for illustrative purposes only.

15. The staff notes the following with respect to Approach A:

(a) Approach A views the lease contract as the unit of account for the purposes of measurement, rather than measuring the ROU asset and liability separately subsequent to initial recognition and measurement.

(b) Approach A results in a consistent, straight-line pattern of expense recognition over the lease term, assuming an even level of benefit consumption by the lessee.

(c) Approach A also reduces complexity as compared to the annuity-based approach described below because additional calculations are not required to measure the ROU asset during the lease term (except for impairment calculations if the ROU asset is impaired).

16. The staff also acknowledge the following disadvantages of Approach A:

    (a) Some may argue that Approach A requires amortization/depreciation expense to be dependent on the interest cost component rather than the pattern of benefits established.

    (b) Approach A may require additional reassessment guidance when the payment pattern changes after initial recognition and measurement, for instance if the lessee were to prepay the lease.

    (c) Some may question the nature and conceptual basis for the carrying amount of the ROU asset in periods subsequent to initial recognition and measurement.

    (d) Additional impairment considerations, for example an onerous contract test, may need to be evaluated for the ROU asset.

Approach B – Annuity Approach

17. Alternatively, the Boards may choose to proceed with the annuity-based approach discussed in Agenda Paper 1H / FASB Memo 162 discussed at the April 2011 joint meeting. The annuity-based approach is a method in which, subsequent to initial recognition, the ROU asset is measured independently of the liability to make lease payments reflecting both the consumption of benefits over the lease term and the time value of money.

18. Approach B should effectively address all lease contracts, irrespective of the payment patterns, because the ROU asset is calculated and amortized based on the pattern in which the benefit of the ROU asset is consumed rather than on the pattern of cash payments or as a balancing figure. Under this approach, after initial recognition the ROU asset is subsequently measured at the present value of the remaining future benefits, discounted at the discount rate used to initially measure the ROU asset. By using this method, the ROU asset reflects the pattern in which the benefits from the underlying asset are consumed.

19. Using the example in paragraph 8 of this paper, the staff thinks the following will be the resulting practice.

(a) First, consistent with Approach A and the proposals in the ED, the entity will create a payment schedule to calculate the initial liability to make lease payments and ROU asset. The net present value of future lease payments is CU 951 which is recorded as the liability to make lease payments and ROU asset at commencement of the lease.

(b) Next, the entity will calculate the pattern of benefits which, in the example, is calculated as CU 135 per year. CU 135 is determined using a method to calculate what annuity payment would be required to equate to a present value equal to the recorded ROU asset, assuming a discount rate of 7% and a lease period of 10 years (typically using the Excel PMT function). This calculation also assumes that the lessee consumes benefits consistently over the lease term.

(c) At the end of Year 1 the entity would calculate:

(i) An interest component consistent with the ED proposals. In the example, since a payment was made at commencement of the lease the liability outstanding for the year is CU 851 and using the rate of 7 percent interest expense is calculated as CU 60.

(ii) An amortization/depreciation component calculated in one of two methods, each yielding the same result in Year 1 and throughout the lease term.

- The first method is a calculation of the end of year ROU asset and the expense recognized is a resulting amount based on the reduction of the ROU asset. The ROU asset is calculated at the end of year 1 based on the present value of the remaining future benefits (Year 2 – Year 10). In the example the ROU asset is calculated as CU 883 at the end of year 1 so the resulting expense to be recorded is CU 69 (initial balance of CU 951 less balance at end of year 1 of CU 883).
- The second method calculates the expense and the ending ROU asset is the result. The expense is calculated as the pattern of benefits (CU 135 in the example) less the

interest accrued on the ROU asset during the period (calculated as the ROU asset of CU 951 multiplied by the discount rate 7 percent) which results in CU 69.

20. The following journal entries illustrate Approach B:

Day 1 – commencement of the lease			
DR: Right-of-use asset		951	
	Cr: Liability to make lease payments	951	
Year 1			
DR: Rent expense (includes interest of 60 & amort/dep of 69)		129	
DR: Liability to make lease payments		140	
	CR: Cash	(200)	
	CR: Right-of-use asset	(69)	
Year 10			
DR: Rent expense (includes interest of 0 & amort/dep of 127)		127	
DR: Liability to make lease payments		-	
	CR: Cash	-	
	CR: Right-of-use asset	(127)	

21. The table below illustrates the example through all periods of the lease.

	STMT OF FINANCIAL POSITION				PROFIT OR LOSS		
Period	**Cash Payment**	**Pattern of Benefits**	**ROU Asset**	**Lease Obligation**	**Amort/ Depr Expense**	**Interest Expense**	**Total Lease Expense**
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5	125	135	555	(508)	90	41	132
6	150	135	459	(394)	97	36	132
7	150	135	355	(271)	103	28	131
8	150	135	245	(140)	111	19	130
9	150	135	127	0	118	10	128
10		0		n/a	127	(0)	127
					-		
TOTAL	**1,300**				**951**	**349**	**1,300**

[A] Consistent with the Boards' tentative decision in the April 2011 joint meeting only total lease expense would be required to be presented. Amortization/depreciation expense and interest expense are displayed for illustrative purposes only.

22. The staff notes the following with respect to Approach B:

    (a) The carrying amount of the right-of-use asset is determined independently of the liability to make lease payments. Therefore any subsequent analysis for impairment, revaluation or other adjustments may be easier than under Approach A.

    (b) Approach B results in a straight-line lease expense recognition pattern when benefits are consumed evenly over the lease term and cash payments are made evenly on a regular basis. It does not result in straight-line expense recognition pattern when the pattern of benefits does not match the pattern of cash payments because of time value of money differences (as in the example above). This 'non straight-line expense' pattern will occur even when the pattern of benefits received by the lessee from the ROU asset is constant throughout the lease term.

    (c) Utilizing the pattern of benefits to measure the ROU asset in subsequent periods provides a supportable carrying amount of the ROU asset.

23. The staff also acknowledge the following disadvantages of Approach B:

    (a) Creates complexity in the accounting and requires a separate calculation for the subsequent measurement of the ROU asset in addition to the calculation for the liability to make lease payments.

    (b) An annuity-based depreciation method is not permitted in existing standards and some staff members think that it should not be allowed in the leases standard as it is rare, if ever, that a ROU asset would be consumed in a reverse accelerated depreciation pattern which can, in effect, be viewed as being the outcome of an annuity method. However, other staff members disagree and think that an annuity-based method appropriately allocates the cost of the asset over its useful life in a way that reflects both the pattern of consumption of economic benefits (consistently with existing standards) and also the time value of money.

Staff recommendation

24. In general, the majority of the staff is attracted to the simplified straight-line approach (Approach A – Modified Annuity Approach) and thinks that it is the likely outcome even if the Boards prefer the annuity-based approach (Approach B). This is because most lease contracts require the lessee to make regular and even lease payments throughout the lease term, which typically match the pattern of benefits received from the ROU asset.

25. Additionally, in comparing the two approaches the staff acknowledges that if Approach A (Modified Annuity Approach) is described as a methodology that utilizes a pattern of benefits (albeit without time value) to determine the recognized amortization/depreciation amount, Approach A (Modified Annuity Approach) is similar to Approach B (Annuity Approach). However, in contrast to an annuity-based approach (Approach B), the modified approach (Approach A) links the interest component of the calculation to the recognized liability rather than the ROU asset.

26. If the Boards' objective of the methodology is to achieve a straight-line recognition pattern, the staff thinks that Approach A (Modified Annuity

Approach) is most appropriate. However, if the Boards' objective is to create an independent and supportable ROU asset throughout the lease term the staff thinks that Approach B (Annuity Approach) is most appropriate.

27. The majority of the staff recommends Approach A (Modified Annuity Approach), noting the following which weighed into the recommendation:

    (a) Approach A's straight-line expense recognition pattern;

    (b) Approach A's simplicity in calculation and application; and

    (c) Approach A's approximation of an annuity-based approach.

28. The staff that support Approach A acknowledge the following challenges, which are the arguments why some staff would continue to recommend Approach B, the annuity approach:

    (a) Approach A may be viewed as a balancing-figure approach (or 'plug' approach); and

    (b) The ROU asset recognized throughout the lease term in Approach A may lack support which may require additional consideration for impairment and/or subsequent changes in either cash payments or pattern of benefits.

29. Finally, the staff that support Approach A (Modified Annuity Approach) think that Approach A is a practical way of implementing Approach B. Those staff think that the objective and conceptual rational could be aligned with Approach B but allow entities to approximate an annuity-based approach using the Approach A calculation methodology. In most cases the staff thinks any difference between the Approach A and Approach B will be insignificant.

30. One staff member recommends that the Boards reverse their decision to use an annuity-based amortization approach. In that staff member's view, such an approach results in the ROU asset being reflected in the statement of financial position at an amount that is not representionally faithful. That staff member notes that the main purpose of the leases project is to recognize assets and liabilities for the rights and obligations that exist in lease contracts. If those assets and liabilities are mismeasured, then that staff member questions

whether the main objective of the project is being adequately achieved when compared to not recognizing the assets and liabilities at all.

Question
Which approach should be used for subsequent measurement of an other-than-finance lease in the financial statements of a lessee?