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### International Accounting Standards Board

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These notes are based on the staff papers prepared for the IASB. Paragraph numbers correspond to paragraph numbers used in the IASB papers. However, because these notes are less detailed, some paragraph numbers are not used.

#### INFORMATION FOR OBSERVERS

**Board Meeting:** 15 May 2007, London

**Project:** Leases

**Subject:** Different Approaches to Accounting for Options to Extend

or Terminate a Lease (Agenda paper 2B)

#### Introduction

- 1. This paper identifies four possible approaches to accounting for leases that include a lessee option to extend or terminate a lease. In discussing the four approaches, the staff have assumed that it is possible to recast a lease with a termination option as a lease with an extension option (as discussed in Paper 2A/7A).
- 2. The approaches considered in this paper are as follows:
  - Approach 1 The lessee obtains the right to use up to the option exercise date and an option to extend the lease. This approach follows on from the analysis of the asset and liability elements definitions in Paper 2A/7A. However, the staff have a number of concerns with approach 1 (as described in this paper). Consequently, the paper goes on to consider three alternative approaches;
  - Approach 2 The lessee obtains a right to use for the full lease period and an
    option to terminate the lease. This approach is based upon an alternative
    analysis of the elements definitions;

- Approach 3 The lessee obtains a right to use either for the full lease period
  or for the period to the option exercise date. The assets and liabilities
  recognised are based upon the most probable lease term. Options are not
  separately recognised. This approach is not based on the analysis of the
  elements definitions in Paper 2A/7A;
- Approach 4 The lessee obtains a right of use whose measurement is based upon the expected value of the payments under the lease. Options are not separately recognised This approach is, also, not based on the analysis of the elements definitions in Paper 2A/7A.
- 3. The paper illustrates each of these approaches with a simple example and discusses the advantages and disadvantages of each approach. Although this paper uses numerical examples to illustrate the four approaches, they are not intended to indicate the staff's approach to measurement (other than under approach 4 that is to some extent measurement driven).
- 4. This paper discusses each of the four approaches in terms of the right to use that is obtained. Each of the approaches could equally be described as ways of determining the term of the lease. However, the staff have not considered the implications of the different approaches for subsequent accounting for example, the period over which the lessee's right of use asset is amortised (if applicable).

#### **Example**

- 5. To illustrate the four approaches, the staff will use the following simple example of a lease contract with a fixed termination penalty:
  - A piece of machinery is leased for a period of 8 years. The annual rental is 100 payable in advance. At the end of year 5, the lessee has an option to terminate the lease upon payment of a termination penalty of 75. If the lessee does not exercise this option at the end of year 5, it must lease the item for the full 8 years. The expected life of the machinery is 15 years. The lessee has no right to purchase the machinery nor has the lessee guaranteed the value of the machinery at any point. No maintenance or other arrangements are entered into. For simplicity, the time value of money is ignored and it is assumed that the fair value of the right of use in years 6-8 equals the fair value of the obligation to make payments in those years. The first 5 years of the lease are termed the primary period; the final three

years are termed the secondary period. The fair value of the machinery at the beginning of the lease is 1400.

At the lease inception, the lessee could be expected to lease the machinery for the full term, as the termination penalty is assumed to be significant. However, if the value of the machinery to the lessee falls substantially, it might wish to terminate the lease.

6. As discussed above, the staff have concluded that an option to terminate can in general be recast as an option to extend. Consequently, the lease described above could be described as a 5-year lease with an option to extend the lease for an additional 3 years. If the option to extend is not exercised, a penalty of 75 is payable.

### Approach 1 - The lessee obtains the right of use up to the option exercise date

#### **Description**

- 7. Under this approach, the lessee is considered to have the right to use the machinery for 5 years plus an option to call for the right to use the machinery in the secondary period. This option is exercised if the lessee chooses not to terminate the lease at the end of year 5.
- 8. Consequently, the lessee recognises as assets its right to use the leased item for 5 years and its option to call for the machinery in the secondary period.
  Corresponding to these assets, the lessee recognises as liabilities its obligation to make payments during the primary period and its obligation to pay for the option to terminate.
- 9. The assets and liabilities of the lessee can be summarised as follows:

Right to use the machinery years 1- 5 500

Option to call for the machinery (ignoring time value)

Obligation to pay for rentals years 1 - 5 500

<sup>&</sup>lt;sup>1</sup> The value of the machinery to the lessee is not necessarily the same as the fair value of the machinery. For example, if the lessee no longer requires the machinery (and cannot sub-let), it may have little or no value to the lessee. However, the machinery could still have a significant fair value.

- 10. At inception, the intrinsic value of the option to call for the machinery ignoring non-financial factors (for example, lessee needs, convenience etc...) is calculated as:
  - Right to use acquired (Years 6-8) + Termination penalty avoided –
     Obligation to pay (Years 6-8)
  - = 300 + 75 300
  - = 75
- 11. It should be noted that (as discussed in Paper 2A/7A), non-financial factors are likely to have a significant effect on whether the lessee exercises the option.
- 12. Characterising this lease as a 5-year lease with an option to extend is counter-intuitive when in fact the lease agreement describes an 8-year lease with an option to terminate. However, as discussed above, the staff have concluded that options to terminate are economically equivalent to options to extend. Consequently, it is possible to re-characterise a long lease with an option to terminate as a short lease with an option to extend.

#### **Advantages of Approach 1**

- 13. The main advantage of this approach is that it appears to be consistent with the framework and CON 6 definitions of assets and liabilities. As discussed in Paper 2A/7A, it can be argued that the lessee has an unconditional right to use the machinery in the primary period. However, its right to use the machinery in the secondary period is conditional upon the lessee not exercising its right to terminate at the end of year 5.
- 14. This approach is also consistent with the normal treatment of call options. That is, a call option is normally accounted for as an option rather than as the underlying item itself. However, if it is accepted that options to extend can in general be recharacterised as options to terminate, an option to terminate or extend the lease could equally be viewed as a put option.
- 15. Options to renew at market rates would be treated as having little or no value under this approach.

#### **Problems with Approach 1**

- 16. However, there are a number of problems associated with this approach.
- 17. This approach requires the lessee to recognise and measure (at least at initial recognition) its option to terminate the lease. We were told at the leasing working group that options of this type are difficult to measure reliably as they are rarely priced separately from the main lease contract. Measurement issues will be discussed in more detail at a later Board meeting. However, the staff note that if options of this type can not be measured reliably, at least at initial recognition, the framework and CON 6 would suggest that they should not be separately recognised.
- 18. This approach can produce (seemingly) anomalous results. Consider a lease that can be cancelled at any point in time upon payment of a make-whole termination penalty. Under this approach, the lessee has not acquired any right to use the leased item. Rather it has acquired an option to extend the lease on favourable terms. It may be possible to deal with this anomaly by presenting options to extend/terminate together with the associated right of use. However, describing a lease as an option to extend the lease term is counter-intuitive and may reduce the understandability of the financial statements. The staff note that the obligation to pay the make-whole termination penalty may be smaller than the expected payments under the lease.
- 19. This approach would encourage structuring of leases as lessees can minimise the assets and liabilities recognised by shortening the non-cancellable lease term. The staff note that a short lease with an option to extend is economically very different from a long non-cancellable lease and will be priced differently. However, entities will look for ways to minimise the assets and liabilities recognised in the financial statements.
- 20. It can be argued that separate recognition of the option to extend/terminate increases the complexity of the accounting. However, the staff note that leases with options are inherently more complex than simple leases so this additional complexity may be justified.
- 21. Finally, the staff note that this approach takes no account of lessee intent or economic compulsion in identifying the assets or liabilities arising. For example, economic compulsion may make it highly probable that a lessee will choose not to

terminate the lease but this will not change the recognition of the assets and liabilities arising under the lease. Some may consider this an advantage of this approach whilst others will view this as a disadvantage.

#### **Lessor considerations**

22. Under this approach, the assets and liabilities recognised by the lessor would be as follows (assuming symmetry with the lessee treatment)<sup>2</sup>:

	Asset	Liability
Right to receive payment years 1- 5	500	
Right to receive payment for the option	75	
Interest in the residual	900	
Obligation to grant right of use for secondary period at a fixed price (written option)		75

23. Under this approach, a lease that gives the lessee the right to terminate the lease at any time (for example, a lease with a "make-whole" termination penalty) will not give rise to a right to receive rentals in the financial statements of the lessor.

### Approach 2 – The lessee obtains a right of use for the full lease period Description

- 24. Under this approach, the lessee is considered to have a right to use the machinery for the full 8 years plus an option to terminate the lease at the end of year 5. Consequently, the lessee recognises as an asset its right to use the machinery for the full 8 years. The lessee recognises two liabilities: an obligation to pay rentals for the first 5 years of the lease; and an obligation to either pay rentals in the secondary period or pay the penalty and surrender its right of use in respect of the secondary period.
- 25. In addition, the lessee has an asset representing its option to terminate the lease at the end of year 5.
- 26. The assets and liabilities of the lessee can be summarised as follows:

<sup>&</sup>lt;sup>2</sup> Some of the tentative conclusions reached in the IASB's Insurance project may be relevant when considering the treatment of options in the financial statements of lessors. These will be analysed by the staff at a later meeting.

	Asset	Liability
Right to use the machinery years 1-8	800	
Option to terminate the lease (ignoring time value)	Nil	
Obligation to pay rentals years 1 – 5		500
Obligation to:		300
<ul> <li>Pay rentals years 6 − 8 or</li> </ul>		
• Surrender right of use years 6 – 8		

- 27. At inception, the intrinsic value of the option to terminate the lease is calculated as:
  - Obligation to pay avoided (Years 6-8) Right to use surrendered (Years 6-8) Penalty
  - = 300 300 75
  - = (75)
- 28. Ignoring non-financial factors (for example, lessee needs, convenience etc...), the option to terminate is out of the money by 75. However, an option that is out of the money still meets the definition of an asset as it is a resource controlled by the lessee from which future economic benefits could flow. Even though the option is out of the money, it will have time value reflecting the fact that it could move in to the money at some future date. This time value is ignored in these examples, so the value of the option is treated as nil.

#### Analysis of assets and liabilities

- 29. Approach 2 is based upon an alternative analysis of the rights and obligations identified in Paper 2A/7A.
- 30. It can be argued that the lessee's right to use the leased item for the full term (primary and secondary periods) of the lease meets the definition of an asset. The right to use is a resource that is controlled by the lessee (through the lease contract), as a result of a past event (the delivery of the item) and it is expected that future economic benefits will flow to the lessee.
- 31. It is clear that the lessee has a liability in respect of the rentals for the primary period of the lease. The lessee has no present obligation in respect of the <u>rentals</u> in the secondary period. However, if the lessee exercises its right to terminate the

lease, it must surrender its right to use the machinery in the secondary period (an asset) and pay a termination penalty. Surrendering an asset will result in an outflow of economic benefits from the lessee. Consequently, the lessee has a present obligation to either surrender its right of use and pay the termination penalty or make rentals payments in the secondary period. Taken together, it can be argued these obligations meet the definition of a liability.

- 32. Under this approach, measurement of the liability would be consistent with the characterisation of the right to use asset that is recognised. As a right to use is recognised in respect of the full term of the lease, the liability will be for rentals for both primary and secondary periods. This is also the minimum payment at inception of the lease that will satisfy the lessee's liability to the lessor.
- 33. In addition, the lessee has an option to terminate the lease at the end of the primary period (a put option). This is currently out of the money. It will cost the lessee more to terminate the lease than to continue into the secondary period. However, as discussed above, an option that is out of the money still meets the definition of an asset.

#### **Advantages and disadvantages**

- 34. As discussed above this approach can be reconciled to the framework and CON 6 definitions of assets and liabilities.
- 35. Approach 2 ensures that the liability recognised by the lessee is the full amount of any potential obligation. This means that leases that can be terminated at any point in time upon payment of a make-whole penalty are nevertheless treated as giving rise to a right to use and an obligation to make payments. This is likely to be more understandable to users than describing the lease as an option to acquire a right of use and an obligation to pay for that option (as is the case in approach 1). However, an option to extend at market rentals would lead to an asset and liability for the full period of the lease.
- 36. The fact that this approach results in the recognition of the full amount of any potential liability will significantly reduce the ability of entities to structure round the lease accounting rules and attempt to minimise the assets and liabilities recognised.

- 37. As with approach 1, this approach requires the lessee to recognise and measure (at least at initial recognition) its option to terminate the lease. We were told at the leasing working group that options of this type are difficult to measure reliably as they are rarely priced separately from the main lease contract.
- 38. Lessee intent and economic compulsion do not affect the assets and liabilities recognised. Some may see this as an advantage of this approach whilst others will consider this a disadvantage.

#### Lessor considerations

39. Under this approach, the assets and liabilities recognised by the lessor would be as follows (assuming symmetry with the lessee treatment):

	Asset	Liability
Right to receive rentals years 1- 5	500	
Right to receive rentals years 6 -8	300	
Interest in residual	600	
Obligation to permit termination (written option)		nil

40. It can be argued that recognising a right to receive rentals in respect of the secondary period does not faithfully represent the assets of the lessor. In practice, the lessor has either a right to use<sup>3</sup> the item in the secondary period and receive the termination penalty or receive rentals. It is the right to receive the lower of these two amounts that is recognised by the lessor – in this case the right to receive rentals in years 6-8.

# Approach 3 - The lessee recognises assets and liabilities based upon the most probable lease term

#### **Description**

41. Under this approach, the lessee's option to terminate the lease is not separately recognised. The assets and liabilities recognised depend upon whether it is probable<sup>4</sup> the option will be exercised:

<sup>3</sup> The lessor is unlikely to exercise its right of use in the secondary period in the same way as the lessee. It is likely that the lessor will seek to either sell the machinery or re-lease it to another lessee.

<sup>&</sup>lt;sup>4</sup> Note, in this paper we use "probable" as the threshold for recognition of the rights and obligation arising in the secondary period. However, other probability thresholds could be used - for example, "reasonably certain/assured". A probability threshold is used to determine whether rentals payable in a

- If it is probable that the option to terminate will be exercised, the lessee will recognise a right of use in respect of the primary period only.
- If it is not considered probable that the option to terminate will be exercised, the lessee will recognise a right of use in respect of both the primary and the secondary period.
- 42. The following table summarises the assets and liabilities recognised under this approach:

	Termination probable		Termination not probable	
	Asset	Liability	Asset	Liability
Right to use the machinery	575		800	
Obligation to pay		575		800

#### Advantages and disadvantages

- 43. This approach has a number of advantages. As discussed above, a number of working group members expressed concerns about the ability of entities to reliably measure options to extend/terminate. Under this approach, options to extend/terminate are not separately recognised so there is no requirement to measure them.
- 44. It can be argued that this approach is most likely to reflect the ultimate outcome of the lease contract. For example, if a lessee is highly likely to extend the lease because the asset is core to its business (economic compulsion), this would result in a longer lease term than where there is no such economic compulsion. Similarly, options that are highly unlikely to be exercised would be ignored. The existence of a "make-whole" termination option could easily be factored into the analysis of whether an entity will extend the lease term. Options to extend the lease at market rentals would only be included if the option was likely to be exercised for non-financial reasons.
- 45. However, there are a number of disadvantages to this approach. Firstly, certain staff believe that this approach fails to recognise as assets options that meet the Framework/CON 6 definitions of assets and liabilities. For example, if it is

secondary lease period should be included in the minimum lease payments under IAS 17 and Statement 13.

- considered probable that the lessee will exercise its option to terminate the lease, the lessee's right to call for the use of the machinery in the secondary period is not recognised.
- 46. If this approach were adopted, the Board would need to decide whether the probability of option exercise is assessed only at inception of the lease or whether it is re-assessed at each reporting date. Assessment only at inception would be simpler, but reassessment at each reporting date would result in a more faithful representation of the expected outcome of the lease contract.
- 47. Under this approach, the assets and liabilities recognised by the lessee will be different depending upon the probability of the option being exercised. Indeed, the assets and liabilities recognised could be significantly different. For example, when the probability of option exercise is 49% the assets and liabilities recognised are very different to when the probability of option exercise is 51%. This could reduce the comparability of financial statements. It is likely that leases will be structured in such a way that the assets and liabilities recognised by the lessee are minimised. It should be noted that current leasing standards require the lessee to assess whether it is reasonably certain/assured that an option to extend the lease term will be exercised. With many leases is clear whether or not an option to extend will be exercised. However, there are a significant number of leases where this assessment can be difficult.
- 48. This approach requires the exercise of significant judgement on the part of preparers and auditors to determine whether the probability threshold has been crossed. This is not necessarily a disadvantage in a principles based standard. However, the staff note that it is likely that preparers and auditors will request additional guidance to help them make these judgements.

#### **Lessor considerations**

49. The assets and liabilities recognised by the lessor under this approach will be as follows (assuming symmetry with the lessee treatment):

	Termination probable		Termination not probable	
	Asset	Liability	Asset	Liability
Right to receive payment	575		800	
Residual asset	825		600	

## Approach 4 - The lessee obtains a right of use whose measurement is based upon expected value of the payments under the lease

#### **Description**

- 50. As with approach 3, the lessee's option to terminate the lease is not separately recognised.
- 51. The lessee is considered to have the right to use the machinery for the full 8 years. However, the measurement of that right (and the measurement of the corresponding obligation to pay for that right) is based upon the expected weighted average lease payment under the lease. For example, if there is a 20% probability that the option to terminate will be exercised and an 80% probability that the option to terminate will not be exercised, the weighted average lease payment will be 755 (575 \* 20% + 800 \* 80%)<sup>5</sup>. The measurement of the asset and liability either could be assessed only at inception or could be reassessed at each reporting date. Reassessing at each reporting date would result in more relevant financial information.
- 52. The assets and liabilities of the lessee can be summarised as follows (assuming a 755 year weighted average lease payment):

	Asset	Liability
Right to use the machinery	755	
Obligation to pay		755

#### Advantages and disadvantages

53. This approach is consistent with the characterisation of the lease in approach 2. That is, the lessee has obtained the right to use the machinery for the full lease term and has an obligation to pay for that right. Consequently, it can be argued that the right to use the machinery and the obligation to make payments recognised under this approach meet the Framework/CON 6 definitions of assets and liabilities. It is the measurement of these assets and liabilities that changes between the two approaches. Under approach 4, these assets and liabilities are measured at their expected value taking into account the entity's ability to

<sup>&</sup>lt;sup>5</sup> An alternative approach may be to determine the weighted average lease term. In this example, the weighted average lease term would be 7.4 years (5\*20% + 8\*80%) leading to a right to use asset of 740 (7.4\*100).

- terminate the lease. The option to terminate is not recognised separately but is incorporated into the measurement of the right to use asset
- 54. Approach 4 deals with make-whole termination penalties and non-genuine options as options of this type are likely to have a very low probability of exercise.

  Similarly, options to extend at market rentals can easily be accommodated in this approach.
- 55. This approach will take account of economic compulsion and lessee intent (which some may view as an advantage).
- 56. As options to terminate/extend the lease are not separately recognised, the problems discussed above of reliably measuring these options do not arise. However, this measurement issue is replaced by the difficulty of estimating the probabilities of different lease terms.
- 57. There are, however, a number of disadvantages to this approach.
- 58. As with approach 3, this approach will require significant judgement to determine the probability of options being exercised. Where a lease contains multiple options, determining the probability of each option being exercised could be very complex.
- 59. Where the lease term is binary (i.e. either 8 years or 5 years) the liability recognised reflects neither outcome. Approach 4 works best with a lease that can be terminated at any point during the lease term. For example, the assets and liabilities arising out of an 8-year lease cancellable at any time would be measured at the expected value of the right of use/obligation to pay.

#### Lessor considerations

60. The assets and liabilities recognised by the lessor under this approach will be as follows (assuming a 755 weighted average lease payment and assuming symmetry with the lessee treatment):

	Asset	Liability
Right to payment	755	
Interest in residual	645	