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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: **20 November 2008, London**

Project: **LEASE ACCOUNTING**

Subject: **Consideration of Lease Term, Purchase Options, Contingent Rentals and Residual Value Guarantees (Agenda Paper 8A)**

Introduction

1. At the July 2008 Board meetings, the boards decided to adopt a single asset and liability approach to the treatment of options and contingent rentals rather than a component-based approach. Under the single asset and liability approach, contingent rentals and options to extend or terminate a lease are not recognized separately from the right-of-use asset and liability. The boards also have reached a preliminary view to recognize rentals payable in optional periods and contingent rentals as part of the lessee's obligation to pay rentals.
2. The boards also reached a preliminary view to provide guidance on the factors to consider when assessing the lease term. The boards agreed that the guidance would specify that contractual, noncontractual, and business factors would be considered. Lessee intent and past practice would not be explicitly considered.
3. In addition, the boards decided that the initial measurement of the right-of-use asset and obligation to pay rentals should be based on the lessee's *best estimate* of the cash flows arising in optional periods and contingent rentals payable. The boards discussed, but did not come to an agreement on, the

appropriate interpretation (or whether there should even be an interpretation) of *best estimate.*

4. At the October 2008 Leases Working Group meeting the staff received input from the working group that prior to releasing the Discussion Paper for comment the boards should attempt to :

   (a) Reach a converged preliminary view on the determination of the lease term and the measurement of contingent rentals.

   (b) Discuss and reach a preliminary view on whether and how purchase options and residual value guarantees should be included in the initial measurement of the right-of-use asset and the obligation to pay rentals. The boards have not previously considered the treatment of purchase options or residual value guarantees. However, they have many features in common with renewal options and contingent rentals and they are a common feature of lease contracts. Consequently, some Working Group members (and some Board members) believe the boards should reach a preliminary view on these topics.

   (c) Provide a clearer description of the alternative views for the topics above if preliminary views cannot be reached (including a clearer description of what is meant by the term “best estimate”).

5. The purpose of this paper is to get preliminary views from the boards on the initial measurement of the lessee’s right-of-use asset and its obligation to pay rentals. Specifically, the staff would like to clarify which cash flows to include in the initial measurement of the right-of-use asset and the obligation to pay rentals. The Boards’ have previously indicated that their preliminary view is that the right-of-use asset and the obligation to pay rentals will initially be measured at the present value of those cash flows which will represent a cost accumulation measurement of the right-of-use asset. The staff would also like the boards to clarify whether they believe the assessment of the lease term is a question of recognition or measurement.

Lease Term

6. The preliminary views that the boards’ reached at the July 2008 board meeting describe the determination of the lease term as both a recognition and a

measurement question. This can be noted in the following two preliminary views:

(a) *The boards' preliminary view is that the **measurement** of the lessee's right of use asset and its obligation to pay rentals should include a best estimate of the cash flows arising in optional periods.*

(b) *The boards have tentatively decided not to recognise options to extend or terminate a lease separately from the right of use asset. Instead, the boards propose that the assets and liabilities **recognised** by the lessee be based upon an assessment of the lease term.*

7. At the October 21, 2008 Joint Meeting the boards discussed an agenda paper titled "Liabilities, Uncertainties, and Expected Cash Flows" (hereinafter, "the Liabilities paper"). During the discussion of the Liabilities paper the example of a 10-year lease with an option to renew for 5 years was referenced several times. During this discussion, and in previous discussions with the boards, it was unclear whether the assessment of lease term is a question of recognition or measurement.

8. The staff believes the boards should clarify whether the assessment of the lease term is done for purposes of recognition or measurement. If the boards can agree on *what* is being measured there is a better possibility (or at least a possibility) that they might agree on *how* to measure it. In other words, for a 10-year lease with an option to renew for 5 years, is the lessee recognizing:

(a) A 10-year lease with a 5-year option to renew, or

(b) Either a 10-year lease or a 15-year lease

The analysis below attempts to clarify what "the item" is that is being recognized and measured (as referenced in paragraph 28 of the Liabilities paper). The staff has identified two approaches to address this issue, which are discussed below:

- *Approach 1* – Lessee recognises an obligation to pay rentals. Uncertainty regarding lease term is addressed through measurement
- *Approach 2* – Lessee recognises an obligation to pay rentals for a specified lease term. Uncertainty regarding lease term is addressed through recognition.

Approach 1 - Lessee Recognizes an Obligation to Pay Rentals – Uncertainty Regarding Lease Term Is Addressed Through Measurement

9. This approach would describe the lease in paragraph 8 as a 10-year lease with a 5-year option to renew. This approach treats the obligation to pay rentals as the item that is recognized and measured. This approach does not specify whether the obligation to pay rentals is for 10 years or 15 years. The lessor's delivery of the leased property to the lessee is the triggering event[1] that will lead to an outflow of economic resources, and there is no need to specify whether that will be 10 years or 15 years of outflows for recognition purposes. The uncertainty regarding the lease term would be addressed through the measurement of the obligation to pay rentals. The Liabilities paper would suggest that the measurement of the obligation to pay rentals should incorporate expected outcome techniques that take into account the range of possible outcomes and their relative probabilities.

10. This approach is based on the notion that an obligation to pay rentals is incurred (and thus there is no uncertainty in the recognition analysis), and the only uncertainty is in relation to the measurement of the obligation.

11. However, some believe that this approach incorrectly implies the renewal option is being measured. Both boards rejected a components approach to measuring the rights and obligations in a lease contract, partly because the fair values of renewal options are difficult to reliably measure. Some believe that if the value of the option could be reliably measured, the boards would have decided on a components approach to measuring the rights and obligations in a lease contract.

Approach 2 - Lessee Recognizes an Obligation to Pay Rentals For a Specified Lease Term - Uncertainty Regarding Lease Term Is Addressed Through Recognition

12. This approach would describe the lease in paragraph 8 as either a 10-year lease or a 15-year lease. This approach also treats the obligation to pay rentals as the item that is recognized and measured. However, this approach would specify whether the obligation to pay rentals is for 10 years or 15 years. Thus, it would describe the item being recognized as "an obligation to pay 10 years of

[1] Alternatively, the boards may specify that the signing of the lease contract is the triggering event. This issue will be addressed at a later point in the project.

rentals" or "an obligation to pay 15 year of rentals". The lessor's delivery of the leased property to the lessee is the triggering event that will lead to an outflow of economic resources. However this approach views the uncertainty regarding the lease term as uncertainty regarding what is being recognized.

13. Under this approach, if the lessee decides they are measuring a "10 year lease" then the measurement would not include the probability that the lessee would exercise the renewal option.

14. In addition, this approach would not include the measurement of other elements of the lease that are inconsistent with the lease term assessment (for example, residual value guarantees). Consider a lease that is similar to the one described in paragraph 8, except that at the end of the initial 10 years if the lessee does not renew they must guarantee that the value of the leased item will not be less than $10,000 (if the lease runs through the full 15 years the lessee does not guarantee the residual value). If the lessee decides it is recognizing an "obligation to pay 15 years worth of rentals," the measurement of that obligation would not include the probability that the lessee would perform under the residual value guarantee (i.e. the probability that the lessee does not renew the lease).

15. This approach considers the evaluation of renewal options as a question of uncertainty about what exactly the past transaction or event was that gives rise to a present obligation. In other words, did the lessee just obtain the right to use an asset for 10 years and a corresponding obligation to pay 10 years of rentals, or did it obtain the right to use an asset for 15 years with a corresponding obligation to pay 15 years of rentals?

16. Some believe that this approach more appropriately reflects the binary nature of a recognition decision. A lessee will either renew a lease or it won't. This approach would reflect that fact by either including rentals payable in an optional period in the obligation recognized or by excluding them. This approach also would reflect the fact that the boards agreed that renewal options could not be separately measured. Changes in assumptions regarding the lease term could be addressed through reassessment.

17. Others believe that this approach does not accurately reflect that an obligation to pay rentals is incurred (and thus there is no uncertainty in the recognition

analysis), and the only uncertainty is in relation to the measurement of the obligation.

Staff Recommendation

18. The majority of the staff recommends Approach 2—that the boards require an assessment of the lease term to determine what the item is that the lessee is recognizing (for example, a 10-year lease or a 15-year lease).
19. One staff member recommends Approach 1.

Question for the Boards

Q1: Do the Boards agree with the staff's recommendation (Approach 2) to require an assessment of the lease term to determine what the item is that the lessee is going to recognize (for example, a 10-year lease or a 15-year lease)?

Determining Lease Term Under Approach 2

20. If the boards agree with the staff's recommendation, the boards will need to specify how the lessee determines whether it is recognizing a 10-year lease or a 15-year lease. Because this approach would view the inclusion of renewal options in the item being recognized as a "yes" or "no" decision, an expected outcomes approach would not be used to determine whether the lessee is recognizing a 10-year lease or a 15-year lease. The staff believes this is consistent with the recommendation in the Liabilities paper which indicates that "expected outcome approaches are a measurement tool to be used after the decisions about recognition."
21. The staff has identified three approaches to assessing the lease term under this approach:
    (a) Approach 2A – A probability threshold
    (b) Approach 2B – A best estimate
    (c) Approach 2C – A best estimate – Most likely lease term.

Probability Threshold Approach (Approach 2A)

22. At the July 2008 Board meetings the boards rejected the use of a probability threshold to determine whether an optional period should be included in the

lease term. However, some working group members suggested that the boards reconsider that decision. Those working group members believe that by removing the concept of an operating lease from IAS 17, the boards have greatly reduced the tension around the determination of the appropriate lease term. The removal of the operating lease concept means the inclusion or exclusion of a renewal option is no longer an "on/off" switch for recording a lease on the balance sheet. Although any sort of probability threshold would still represent a "bright line," under the new approach the consequences of including or excluding a renewal option would not be as severe. Given that the current approach is well understood under both IFRS and U.S. GAAP, those working group members question whether there is a meaningful incremental benefit of changing the current method for assessing the lease term.

23. If the boards tentatively decide on this approach they would need to determine if they want to retain the probability threshold that is in the current leasing standards (reasonably certain/reasonably assured). The current threshold has generally been interpreted as a very high threshold (higher than probable). Alternatively, the boards could set a lower probability threshold of "probable" or "more likely than not."

Best Estimate (Approach 2B)

24. This approach would require the lessee to make their best estimate of the lease term. This approach would not define "best estimate" as the most likely lease term. This approach would rely on the common sense and judgment of preparers and auditors to determine (based on the factors to consider when assessing renewal) what the substantive lease term is based on reasonable and supportable assumptions.

25. The staff believes this approach is similar to the IASB's tentative decision reached in their redeliberations of IAS 37 that the assessment of whether an entity has a present obligation should be a matter of judgment, taken on the basis of all available evidence.

26. The advantages of this approach are:

- Simplicity. It is virtually impossible for anyone to say "we can't do this." Presumably all lessees could come up with an estimate (based on the factors to consider when assessing renewal) of how long the lease term is

going to be. It is also quite likely that a lessee has an estimate of how long it will use a particular leased asset when it signs the lease. Some working group members noted that the entity would develop similar estimates for budgets or other internal purposes. This approach would probably be the easiest to explain to a non-accountant.

- This approach avoids the "bright lines" associated with a probability threshold.
- Proponents of this approach believe that, despite the lack of a threshold, this approach would not result in significant diversity in practice as the boards' have agreed on the same factors to consider when assessing the lease term.

27. The disadvantages of this approach are:

- Opponents of this approach do not believe it is simple given that the Working Group (and both boards) couldn't seem to reach an agreement on what "best estimate" means without further clarification.
- This approach could be interpreted to allow almost any method for estimating the lease term. A lessee may conclude that their best estimate would always be the "single most likely lease term" because that is their definition of "best estimate." As a result, multiple lessees in similar economic positions could account for the "best estimate" of the same lease in very different ways.

28. Examples 1 and 2 illustrate how this approach might be applied. Example 1 was included in the draft Discussion Paper provided to the Working Group:

Example 1

A lessee enters into a 1-year lease. At the end of each year, the lessee has an option to extend the lease for another year up to a maximum of 5 years. The probability of each of the possible lease terms is as follows:

Lease term	1 year	2 years	3 years	4 years	5 years
Individual Probability	35%	5%	5%	25%	30%

This example represents a fact pattern in which the leased property is specialized equipment used in a new line of business. The probabilities reflect the fact that there

is some (35%) probability that the business would fail and that the lessee would not renew the lease. The probabilities also reflect the fact that if the business does well the lessee will most likely stay for 4 or 5 years.

Under this approach it is likely that the lessee would determine that the lease term is 4 or 5 years. It should be noted that the best estimate of the lease term is not necessarily the lease term with the highest probability (in this example that would be a 1-year term).

Example 2

A lessee enters into a 5-year lease of real estate. At the end of the first 5 years, the lessee has a renewal option to extend the lease at the market rental rate (at the time of renewal) for another 5 years (the lessee then has the same option at the end of years 10, 15, and 20). The lessee constructs significant leasehold improvements on the real estate that have a 10 year life.

Lease term	5 years	10 years	15 years	20 years	25 years
Individual Probability	20%	65%	5%	5%	5%

This example represents a relatively mature business that has experience in expanding to new locations (for example, a successful restaurant chain). The probabilities reflect the fact that the lessee will generally need more than 5 years to recover their investment in the location; however, there is a chance that they would be willing to bear the costs of non-renewal. The probabilities for renewal after year 10 are very low as the lessee is unable (at lease inception) to point to a specific contractual, noncontractual, or business factor that would cause them to renew in 10 years.

Under this approach, the staff believes the lessee would determine that the lease term is 10 years.

Best Estimate – Most Likely Lease Term (Approach 2C)

29. This approach would define the “best estimate” of the lease term as the length of the lease term that the lessee believes is most likely to occur (in statistical

terms, the mode[2]) based on the contractual, non-contractual, and business factors specified by the boards. This approach would attempt to provide some clarity around the phrase "best estimate."

30. The advantages and disadvantages of this approach are similar to the advantages of the "pure" best estimate approach (as described above). However, by adding some clarification around the phrase "best estimate" it could be easier to apply. The disadvantage to this approach is, conceptually, it would not indicate what the lease term is when there is an equal likelihood of renewing or not renewing a lease.

31. This approach could (theoretically) result in a 1-year lease term for Example 1 based on the probabilities in the table. However, several Working Group members disagreed with assigning a probability weighting to different lease terms. One Working Group member objected to presenting this example in a table format (with associated probabilities for each year) because lessees would generally not quantify their lease renewal assessment in such a way (and this approach would not require them to formally assign a probability weighting to all possible outcomes under the lease). In other words, it is likely that a lessee would still select 4 or 5 years as the lease term under this approach if they were forced to determine the most likely lease term. One might argue this is particularly likely to happen in Example 1 given that if a lessee did select a 1-year lease term, they would be indicating that failure is the most likely outcome (which presumably is not the reasoning that led them to this new line of business).

32. The staff believes this approach would result in a 10-year lease term for Example 2.

Staff Recommendation

33. The majority of the staff recommends Approach 2C—that the boards require an assessment of the lease term to determine what the item is that the lessee is recognizing (for example, a 10-year lease or a 15-year lease). The lease term should be based upon the lessee's best estimate considering the contractual, noncontractual, and business factors specified by the boards. Best estimate

[2] In statistics, the mode is the value that occurs the most frequently in a data set or probability distribution.

should be described as the lease term that the lessee believes is most likely to occur.

34. One staff member recommends Approach 2A.

Question for the Boards

Q2: Do the Boards agree with the staff recommendation (Approach 2C) that the lease term should be the lease term that the lessee believes is most likely to occur (considering specified contractual, non-contractual and business factors)? If not, how do the Boards believe the lease term should be determined?

Purchase Options

35. Purchase options allow the lessee the option to purchase the leased property on or after a specified date. The exercise price of the option may be at a bargain price, at fair value, or the price may be a specified fixed amount that does not represent a bargain price at the inception of the lease.

36. Existing standards require the exercise price of a purchase option to be included in the minimum lease payments if it is reasonably certain[3] at inception of the lease that the lessee will exercise the purchase option. Consequently, if the lease is classified as a finance lease, the exercise price of the option is included in the recognised asset and liability.

Purchase Options- Recognition

37. The staff believes a purchase option is essentially the "ultimate renewal option." In other words, providing a purchase option is no different from providing renewals that extend over the entire economic life of the leased property. The staff can see no reason why the boards would establish a different recognition threshold, or allow for separate recognition, for the cash flows associated with purchase options as compared to the cash flows associated with optional renewal periods. The different recognition approaches, and the advantages and disadvantages to the different approaches, are the same as those discussed in the Lease Term section of this paper. As such, the staff recommends that the boards require an assessment of whether

[3] Statement 13 uses the term *reasonably assured.*

or not a lessee will exercise the purchase option to determine what the item is that the lessee is recognizing (for example, an obligation to pay rentals or an obligation to pay rentals that would include the exercise price of a purchase option). This assessment should be based upon the lessee's best estimate of whether or not the purchase option will be exercised considering the contractual, noncontractual and business factors specified by the boards. Best estimate should be described as the outcome that the lessee believes is most likely to occur. In addition, the staff believes the factors to be considered in determining whether a purchase option would be exercised would be the exact same contractual, noncontractual, and business factors considered when assessing whether or not a lessee will exercise a renewal or termination option.

Questions for the Boards

Q3: Do the Boards agree with the staff's recommendation to require an assessment of whether or not the lessee will exercise a purchase option to determine what the item is that the lessee is going to recognize (for example, an obligation to pay rentals or an obligation to pay rentals that would include the purchase option price)?

Q4: Do the Boards agree that the purchase option price should be included in the obligation to pay rentals if the lessee believes the exercise of the purchase option is the most likely outcome to occur (considering specified contractual, noncontractual, and business factors)?

Recognition → Measurement

38. At this point the focus of this paper moves from recognition to measurement. The boards' decisions in the Recognition section might affect what they do or do not need to look at in the Measurement section.
39. If the boards selected Approach 2 then the section of the memo on Measurement of Options can be disregarded. In addition, if the boards accepted the staff's recommendation regarding recognition of purchase options, then the section of the memo on Measurement of Purchase Options can be disregarded.

40. However, if the boards selected Approach 1, then the boards will need to consider how the uncertainty associated with renewal options and purchase options will be addressed through measurement. In this case, the boards will need to consider the measurement approaches discussed in Measurement of Options and Measurement of Purchase Options.

41. Under either approach the boards will need to consider how contingent rentals and residual value guarantees will be measured.

42. Before discussing measurement approaches the staff will summarize the discussion at the October 2008 Joint Meeting concerning measurement of liabilities under conditions of uncertainty.

Consideration of the October 2008 Joint Meeting Discussions

43. As discussed above, at the October 21, 2008 Joint Meeting, the boards discussed the Liabilities paper. The following three recommendations were made in that paper:

- Expected outcome approaches are a measurement tool to be used after the decisions about recognition.
- Decisions on measurement should be independent of decisions about recognition.
- Measurements under conditions of uncertainty should always take account of the range of possible outcomes and their relative probabilities. That is, the measurements should always incorporate expected outcome techniques.

44. It appeared that most board members agreed that an expected outcome technique should be the starting point when measuring under conditions of uncertainty. However, some board members noted that they would not *always* conclude that an expected outcome technique is the appropriate way to measure under conditions of uncertainty. The following examples were given as situations in which some Board members would depart from an expected outcome technique:

- Situations in which it is difficult to determine precise probability weightings. Some Board members questioned why a probability-weighted measurement is any better than a non-probability-weighted measurement when there is a low level of confidence in the assigned

probabilities (for example, due to a lack of information with which to develop the probabilities).

- Situations with a skewed distribution. Some Board members cited the example of a measurement where a large range of possibilities exist, but most of the probability is skewed to one end of the range. Those Board members questioned the relevance of a measurement that is influenced by an outcome that has a very low probability of occurring. Some Board members also questioned the ability of preparers to adequately determine the probabilities of some outcomes in that situation.

45. The staff has identified two alternative measurement approaches to an expected outcome technique. The staff will provide an overall description of the three measurement approaches, and the advantages and disadvantages of the approaches. The staff will then discuss how these approaches might apply to the different elements of the lease. The three approaches and their advantages and disadvantages are:

(a) *Probability-weighted best estimate (Expected outcome technique)*

(b) *Best estimate*

(c) *Best estimate – Most likely amount*

Probability-weighted best estimate (Expected outcome technique)

46. This approach would always take account of the range of possible outcomes and their relative probabilities when measuring under conditions of uncertainty.

47. The advantages of this approach are:

- It requires consideration of all potential outcomes, including those with low probabilities of occurring. Some believe this results in a more precise measurement.
- This approach, particularly when combined with reassessments of the liability measurement, more accurately reflects the current state of the reporting entity (the other approaches attempt to predict the outcome of an uncertain event).
- It would not have the ambiguity of an approach that simply asks for a “best estimate” of the liability

48. The disadvantages of this approach are:

- A probability-weighted analysis could provide a false sense of security. In other words, if there is uncertainty regarding the measurement of the liability, a probability-weighted analysis will reflect outcomes that are just as uncertain as the lessee's best estimate of the liability, despite appearing to be more precise. For this reason, some believe that the computational transparency of a probability-weighted analysis does not necessarily result in a superior measurement.
- In some cases (for example, if the uncertainty associated with renewal options is addressed through measurement), it can result in a measurement that reflects an outcome that will never happen in reality.
- This approach could force a lessee to perform a probability-weighted calculation for accounting purposes only. For example, it is unlikely (particularly for a lessee of thousands of assets) that a lessee is performing a rigorous statistically or probability-weighted analysis to analyze contingent rentals or residual value guarantees.

Best Estimate

49. This approach would require the lessee to make their best estimate of the obligation to pay rentals. This approach would not specify any additional clarification around the term "best estimate" (for example, by describing the best estimate as "the most likely" amount) and it would not require a probability-weighted average technique as the way to determine the best estimate. This approach would rely on the common sense and judgment of preparers and auditors to determine their best estimate of the obligation to pay rentals based on reasonable and supportable assumptions.

50. The advantages of this approach are:

- Simplicity. It is virtually impossible for anyone to say "we can't do this". Presumably all lessees could come up with an estimate of the obligation to pay rentals. Some working group members noted that the entity would develop similar estimates for budgets or other internal purposes. This approach would probably be the easiest to explain to a non-accountant.
- This approach results in the recognition of a liability that is consistent with results that can actually occur (as opposed to a weighted average approach

which, in the case of measuring the uncertainty associated with renewal options, may result in an amount payable that is not possible in reality.)

- Some note that the boards' have indicated their preliminary view is that the right-of-use asset and the obligation to pay rentals will be initially measured at the present value of the lease payments which will represent a cost accumulation measurement of the right-of-use asset. If the objective of the measurement is accumulation of costs to be incurred (which the boards have previously indicated that it is), expected cash flows may not produce a representationally faithful estimate of the expected cost.[4]
- This approach would not force a lessee to perform a probability-weighted calculation for accounting purposes only.

51. The disadvantages of this approach are:

- This approach may not be as simple as it appears given that the Working Group (and both boards) couldn't seem to reach an agreement on what "best estimate" means without further clarification.
- The fact that lessees are most likely not performing a rigorous probability-weighted analysis to estimate rentals payable is the exact reason that the accounting standards should demand such an analysis for measurement purposes.
- This approach could be interpreted to allow almost any method for estimating the obligation to pay rentals. For example, nothing would preclude a lessee from performing a probability-weighted average approach to determine their own "best estimate" of the obligation to pay rentals. Similarly, a lessee may conclude that their best estimate would always be the "single most likely amount" because that is their definition of "best estimate." As a result, multiple lessees in similar economic positions could determine the "best estimate" of the obligation to pay rentals very differently, resulting in reduced comparability.

52. The staff consider that the best estimate approach fails to provide sufficient measurement guidance to preparers (as evidenced by the Working Group discussions). In addition, the fact that it can be interpreted in a number of

[4] A similar notion is expressed in paragraph 53 of FASB Statement of Financial Accounting Concepts No. 7.

different ways may reduce comparability. Consequently, the staff have not recommended this approach.

Best Estimate – Most Likely Amount

53. This approach would define "best estimate" of the obligation to pay rentals as the amount of rentals that the lessee believes is most likely to occur. This approach would attempt to provide some clarity around the phrase "best estimate". In statistics, the mode is the value that occurs the most frequently in a data set or probability distribution. However, this approach would not require a statistically based determination of the lease term and it would not require a lessee to formally assign a probability weight to all possible outcomes under the lease. It would simply use the phrase "most likely amount" as a way to clarify what is meant by "best estimate".

54. The advantages and disadvantages of this approach are similar to the advantages of the "pure" best estimate approach (as described above) when compared to a probability-weighted average approach. However, by adding some clarification around the phrase "best estimate" it could be easier to apply. The disadvantage to this approach is, conceptually, it would not indicate what the obligation to pay rentals is when there is no amount in a range that is more likely than any other.

Applying the Measurement Approaches to Lease Contracts

55. At the July 2008 Board meetings, the staff indicated that to determine the initial measurement of the right-of-use asset and the obligation to pay rentals, the lessee must first identify which cash flows to measure. Although lease contracts may contain a range of different features and options, the following elements are commonly found in lease contracts (in both simple and complex leasing arrangements):

    (a) Options to extend the lease
    (b) Obligations to pay contingent rentals
    (c) Residual value guarantees (obligations to compensate the lessor if the value of the leased asset falls below a specified value)
    (d) Purchase options (options to purchase the leased asset on payment of an additional amount).

56. It is not uncommon for a lease to contain a mixture of some of the above features or all of the above features. The following sections discuss measurement alternatives for these different elements. For all alternatives the identified cash flows would be recorded at their present value discounted at the lessee's incremental borrowing rate (consistent with boards' decision at the July 2008 Board meetings).

57. The boards will note that some staff members have recommended the same measurement approach (a "best estimate – most likely amount" approach) for all the elements of a lease that are discussed in this memo. In addition, the boards will note that those staff member's recommendations regarding recognition (i.e. assessment of the lease term and purchase options) in paragraphs 33 and 37 of this memo are consistent with their recommended measurement approach in paragraphs 74, 82, 97 and 114. Those staff members believe this results in a standard that is simpler to apply, particularly for leases that contain a mixture of the various elements. In addition, many of these elements can function similarly (for example, purchase options have many of the same characteristics as renewal options that also can have the same characteristics as certain contingent rentals), which makes it difficult to justify different measurement approaches for different elements. Those staff members also believe a consistent recognition and measurement approach for all elements of a lease contract would discourage structuring of lease contracts to take advantage of different measurement approaches for different elements.

Measurement of leases containing options to extend or terminate the lease

58. If the boards accept the staff recommendation regarding the recognition of leases containing options to extend or terminate (Approach 2), the following section on measurement can be disregarded. This is because under Approach 2 the lessee must determine whether the lease is a 10-year lease or a 15-year lease (for the example in paragraph 8). The measurement of the obligation to pay rentals will then be consistent with the lease recognised. If the lease is determined to be a 10-year lease, the lessee will recognise a liability equal to the present value of 10 years of rentals discounted using the lessee's incremental borrowing rate.

59. However, if the boards decide to adopt Approach 1 (recognise a 10-year lease with an option), the boards will need to decide how the recognised obligation to pay rentals should be measured.

60. At the July 2008 Board meetings the boards reached a preliminary view that the measurement of the lessee's right-of-use asset and its obligation to pay rentals should include a best estimate of the cash flows arising in optional periods. The boards tentatively decided that the assessed lease term should be based upon the lessee's best estimate. However, the IASB did not reach a preliminary view on whether to use a probability-weighted best estimate or a non-probability-weighted best estimate of the lease term. The FASB supports the use of a non-probability-weighted best estimate of the lease term; however, Working Group members (and some IASB Board Members) expressed confusion regarding what the term "best estimate" means and how it would be applied.

61. As discussed above, the staff have identified three possible approaches to measurement.

(a) Probability-weighted best estimate (Expected outcome technique)

(b) Best estimate

(c) Best estimate – most likely amount

Probability-weighted best estimate (Expected outcome technique)

62. Consider the following example:

Example 1

A lessee enters into a 1-year lease and pays annual rentals of CU100. At the end of each year, the lessee has an option to extend the lease for another year up to a maximum of 5 years. The probability of each of the possible lease terms is as follows:

Lease term	1 year	2 years	3 years	4 years	5 years
Individual Probability	35%	5%	5%	25%	30%
Annual rental (CU)	100	100	100	100	100

63. Under an expected outcomes approach to measurement, the lessee in Example 1 would recognise an obligation to pay rentals equal to the present value of CU310 (100 x 35% + 200 x 5% + 300 x 5% + 400 x 25% + 500 x 30%)).

64. The advantages of this approach are (in addition to the advantages listed in paragraph 47):

- Some believe that this approach is the only approach that reflects uncertainty about lease term in the measurement of the obligation to pay rentals. Some believe that because the other measurement approaches require the lessee to pick one possible outcome they do not reflect the uncertainty surrounding the lease term.

65. The disadvantages of this approach are (in addition to the disadvantages listed in paragraph 48):

- This approach can result in the recognition of a liability that corresponds to a lease term that is not possible in reality. In Example 1, the lease term implied by an obligation to pay rentals of CU310 is 3.1 years; an impossible lease term. A similar result will occur in a lease with a termination option and other features, for example, a residual value guarantee. Consider a lease in which the lessee leases an automobile for 5 years with an option to terminate at the end of the third year. If the lessee cancels the lease at the end of the third year they must guarantee that the value of the car will not be less than $10,000 (if the lease runs through the full term the lessee does not guarantee the residual value). This approach would produce a measurement that is a hybrid of the lessee renewing and providing a residual value guarantee (a result that cannot happen in reality). A similar result could exist with a purchase option (i.e. the measurement could reflect a hybrid of the lessee both renewing the lease and purchasing the asset). This problem could potentially be mitigated if the lessee is required to reassess the measurement of the obligation to pay rentals.

Best Estimate

66. This approach would require the lessee to make their best estimate of the lease term. This approach would not specify any additional clarification around the term “best estimate” (for example, by describing the best estimate as “the most

likely lease term") and it would not require a probability-weighted average technique as the way to determine the best estimate. This approach would rely on the common sense and judgment of preparers and auditors to determine (based on the factors to consider when assessing renewal) what the substantive lease term is based on reasonable and supportable assumptions.

67. The advantages of this approach are (in addition to the advantages listed in paragraph 50):

- This approach, despite the lack of a threshold or probability-weighted average, would not result in significant diversity in practice as the boards' have agreed on the same factors to consider when assessing the lease term.
- This approach results in the recognition of a liability that is consistent with a lease term that is possible (as opposed to a weighted average approach that may result in an amount payable that corresponds to a lease term that is not possible in reality.) This approach better reflects the fact that a renewal decision is a "yes or no" decision.
- While a lessee most likely has an estimate of how long it will use a leased asset, it is unlikely (particularly for a lessee of thousands of assets) that a lessee is performing a rigorous statistically or probability-weighted analysis around this decision. This approach would not force a lessee to perform a probability-weighted calculation for accounting purposes only.

68. The disadvantages of this approach are discussed in paragraph 51.

69. Examples 1 and 2 illustrate how this approach might be applied. Example 1 was included in the draft Discussion Paper provided to the Working Group:

Example 1

A lessee enters into a 1-year lease. At the end of each year, the lessee has an option to extend the lease for another year up to a maximum of 5 years. The probability of each of the possible lease terms is as follows:

Lease term	1 year	2 years	3 years	4 years	5 years
Individual Probability	35%	5%	5%	25%	30%

This example represents a fact pattern in which the leased property is specialized equipment used in a new line of business. The probabilities reflect the fact that there

is some (35%) probability that the business would fail and that the lessee would not renew the lease. The probabilities also reflect the fact that if the business does well the lessee will most likely stay for 4 or 5 years.

Under this approach it is likely that the lessee would determine that the lease term is 4 or 5 years. It should be noted that the non-probability-weighted best estimate of the lease term is not necessarily the lease term with the highest probability (in this example that would be a 1-year term). It also should be noted that this approach does not require a lessee to assign individual probabilities to different outcomes.

Example 2

A lessee enters into a 5-year lease of real estate. At the end of the first 5 years, the lessee has a renewal option to extend the lease at the market rental rate (at the time of renewal) for another 5 years (the lessee then has the same option at the end of years 10, 15, and 20). The lessee constructs significant leasehold improvements on the real estate that have a 10-year life.

Lease term	5 years	10 years	15 years	20 years	25 years
Individual Probability	20%	65%	5%	5%	5%

This example represents a relatively mature business that has experience in expanding to new locations (for example, a successful restaurant chain). The probabilities reflect the fact that the lessee will generally need more than 5 years to recover their investment in the location; however, there is a chance that they would be willing to bear the costs of non-renewal. The probabilities for renewal after year 10 are very low as the lessee is unable (at lease inception) to point to a specific contractual, noncontractual, or business factor that would cause them to renew in 10 years.

Under this approach the staff believes the lessee would determine that the lease term is 10 years. This approach is based on that notion that a lessee would probably not have a very precise estimate of the probability that it will renew or not renew in the periods after year 10 (and thus, forcing an entity to assign a probability to those periods would not result in a measurement that is superior to the lessee's best estimate of the lease term). Some believe that any measurement that fails to reflect the

probability (albeit small) that a lessee will renew the lease past year 10 is an inferior measurement.

Best Estimate – Most Likely Lease Term

70. This approach would define the "best estimate" of the lease term as the length of the lease term that the lessee believes is most likely to occur based on the contractual, noncontractual, and business factors specified by the boards. This approach would attempt to provide some clarity around the phrase "best estimate."

71. The advantages and disadvantages of this approach are similar to the advantages of the "pure" best estimate approach (as described above) and are also described in paragraph 53.

72. This approach could (theoretically) result in a 1-year lease term for Example 1 based on the probabilities in the table. However, several Working Group members disagreed with assigning a probability weighting to different lease terms. One Working Group member objected to presenting this example in a table format (with associated probabilities for each year) because lessees would generally not quantify their lease renewal assessment in such a way. In other words, it is likely that a lessee would still select 4 or 5 years as the lease term under this approach if they were forced to determine the most likely lease term. One might argue this is particularly likely to happen in Example 1 given that if a lessee did select a 1-year lease term, they would be indicating that failure is the most likely outcome (which presumably is not the reasoning that led them to this new line of business). This approach would not require a lessee to formally assign a probability weighting to all possible outcomes under the lease.

73. The staff believes this approach would result in a 10-year lease term for Example 2.

Staff Recommendation

74. If the boards decide on Approach 1 for recognition, some staff members recommend that the measurement of the lessee's obligation to pay rentals should be based upon the lessee's best estimate of the lease term considering the contractual, noncontractual, and business factors specified by the boards.

Best estimate should be described as the lease term that the lessee believes is most likely to occur. Those staff members believe that the disadvantages associated with requiring a probability-weighted best estimate outweigh the advantages. Those staff members also believe that applying an expected outcome approach would result in a fair value type of measurement that could be considered inconsistent with the cost accumulation model that the boards decided should be used to measure the right to use asset and obligation to pay rentals.

75. Other staff members believe that the only approach to measurement that is consistent with Approach 1 to recognition is an expected outcome approach. Consequently, they recommend adopting a probability-weighted best estimate approach to measurement if the boards decide to adopt Approach 1 to recognition.

Question for the Boards

Q5: Which of the approaches to measurement do the boards support?

Purchase Options - Measurement

76. If the boards accept the staff's recommendation regarding the recognition of leases containing purchase options (Approach 2), the following section on measurement can be disregarded. This is because under Approach 2 the lessee must determine whether the purchase option will or will not be exercised. The measurement of the obligation to pay rentals will then be consistent with the lease recognised. If the lessee determines the purchase option will be exercised, the lessee will recognise a liability equal to the present value of rentals plus the exercise price of the option discounted using the lessee's incremental borrowing rate.

77. However, if the boards decide to adopt Approach 1 (recognise a 10-year lease with an option), the boards will need to decide how the recognised obligation to pay rentals should be measured.

78. The following represent the approaches for measuring the cash flows arising from a purchase option (as part of the initial measurement of the right-to-use asset and obligation to pay rentals). As the advantages and disadvantages of the various "best estimate" approaches will be substantially the same as those

described in the discussion of measurement of renewal options, the staff will not repeat those same arguments within this section.

Probability-weighted best estimate (Expected outcome technique)

79. An expected outcomes technique would require the lessee to assign a probability weighting to whether or not they would exercise the purchase option. Opponents note the weakness of this approach when applied to a lease that has two options at the end of the initial term: purchase the leased asset or renew the lease. A probability-weighted approach to determining the lease term could produce a measurement that is a combination of the lessee renewing the lease and purchasing the asset.

Best Estimate

80. This approach would require the lessee to make their best estimate of whether or not they would exercise the purchase option considering the contractual, noncontractual, and business factors specified by the boards. If the lessee's best estimate was that they would exercise the purchase option, the amount of the purchase price would be included in the initial measurement of the right-of-use asset and the lessee's obligation to pay rentals.

Best Estimate – Most Likely Alternative

81. This approach would include the purchase option price if exercising the purchase option is what the lessee believes is most likely to occur based on the contractual, non-contractual, and business factors specified by the boards.

Staff Recommendation

82. If the boards decide on Approach 1 for recognition, some staff members believe that the initial measurement of the right-of-use asset and the lessee's obligation to pay rentals should be based upon the lessee's best estimate of whether or not the lessee will exercise a purchase option considering the contractual, noncontractual, and business factors specified by the boards. Best estimate should be described as the outcome that the lessee believes is most likely to occur. Those staff members also believe that applying an expected outcome approach would result in a fair value type of measurement that could be considered inconsistent with the cost accumulation model that the boards

decided should be used to measure the right to use asset and obligation to pay rentals.

83. Other staff members believe that the only approach to measurement that is consistent with Approach 1 to recognition is an expected outcome approach. Consequently, if the boards tentatively decide to adopt approach 1 to recognition, they recommend adopting an expected outcome approach to measurement.

Question for the Boards

Q6: Which approach to measurement do the boards support?

Measurement of Contingent Rentals

84. Contingent rentals are defined as lease payments that increase or decrease as a result of changes in factors occurring subsequent to the inception of the lease, other than the passage of time.[5]

85. In the draft Discussion Paper, and in previous discussions with the boards, the staff have described three main categories of contingent rentals:

    (a) Indexed Rentals - Contingent rentals based on price changes or an index. In this type of lease, rentals are adjusted for changes in market lease rates or other indices such as market interest rates or the consumer price index.

    (b) Performance Based Rentals - Contingent rentals based on the lessee's performance derived from the leased item. An example is a lease of retail property in which the lessee pays rentals based upon an agreed percentage of sales made from that property.

    (c) Usage Based Rentals - Contingent rentals based on usage. For example, a car lease may require the lessee to pay additional rentals if the lessee exceeds a specified mileage

86. At the July 2008 Board meetings the boards reached a preliminary view that the assets and liabilities recognized by the lessee should reflect the obligation to make contingent rentals. The boards concluded that although the amount of contingent rental payments that the lessee would make is conditional on future events, the obligation to make them if the specified future events occur is unconditional.

[5] This definition is consistent with the definition of contingent rentals in Statement 13 and IAS 17.

87. In discussing the measurement of contingent rentals, both boards tentatively decided that contingent rentals should be included in the initial measurement of the right-of-use asset and the lessee's obligation to pay rentals based upon the lessee's best estimate of the amount payable. The FASB tentatively decided to require the lessee to use a best estimate of contingent rentals payable. The IASB tentatively decided to require the lessee to use a probability-weighted best estimate of contingent rentals.

88. The following represents the approaches for the initial measurement of contingent rentals (which will determine the initial measurement of the right-to-use asset and the obligation to pay rentals). At the Working Group meeting, the staff did not hear significant challenges to the boards' decision to not adopt the approach required by existing standards;[6] therefore, that approach has not been presented herein.

Best Estimate

89. This approach would require the lessee to make their best estimate of the contingent rentals payable.

90. This advantages of this approach are (in addition to the advantages listed in paragraph 50):

- Simplicity. Several Working Group members commented that it would be possible for a lessee to determine a best estimate of contingent rentals. It was noted that the lessee (and the lessor for that matter) would have some expectation of contingent rents when signing the lease in order to determine if they believed the pricing in the lease was fair. In addition, it is likely the entity would develop similar estimates for budgets or other internal purposes.
- While a lessee most likely has an estimate of how much contingent rent it will pay, it is unlikely (particularly for a lessee of thousands of assets) that a lessee is performing a rigorous statistically or probability-weighted analysis around this decision. This approach would not force a lessee to perform a probability-weighted calculation for accounting purposes only.

[6] Under existing standards, contingent rentals that are based on usage or the lessee's performance are generally expensed as incurred. Contingent rentals that are based on changes in an index are charged as expenses in the periods in which they are incurred.

91. The disadvantages of this approach are (in addition to the disadvantages listed in paragraph 51):

- This approach could be more difficult to apply for purposes of determining estimated contingent rentals as opposed to assessing the lease term. While the lease term is based on a "yes/no" answer at several decision points, contingent rental arrangements could result in a wide array of potential payments and it might be difficult to select one amount as the best estimate.

Best Estimate – Most Likely Amount of Contingent Rentals

92. This approach would define "best estimate" of the contingent rentals payable as the amount of contingent rentals that the lessee believes is most likely to occur.

93. The advantages and disadvantages of this approach are similar to the advantages and disadvantages of the "pure" best estimate approach (as described above) and they are also described in paragraph 53. In addition, the boards have not come to a uniform answer on what amount to choose in a range of equally likely numbers (for example, FIN 14 would require the low point in the range while IAS 37 would require the midpoint).

Probability-weighted best estimate (Expected outcome technique)

94. This approach would require the lessee to make their best estimate of the contingent rentals payable using a probability-weighted expected outcomes technique.

95. The advantages of this approach are (in addition to the advantages listed in paragraph 47):

- A more precise measurement would result because it requires consideration of all potential outcomes, including those with low probabilities of occurring. This will be particularly true for contingent rentals in which the large number of possible outcomes might make it difficult to select the one amount that is the lessee's "best estimate."

96. The disadvantage of this approach are (in addition to the disadvantages listed in paragraph 48):

- Requiring a lessee with a large number of leases to calculate probability-weighted expected outcomes of contingent rentals for each lease would be costly and time consuming. In addition, in situations in which there is uncertainty regarding the amount of contingent rentals, a probability-weighted analysis will reflect outcomes that are just as uncertain as the lessee's best estimate of the contingent rentals payable.

Staff Recommendation

97. Some staff members recommend that the initial measurement of the right-of-use asset and the lessee's obligation to pay rentals should be based upon the lessee's best estimate of contingent rentals payable. Best estimate should be described as the amount of contingent rentals that the lessee believes is most likely to occur.

98. Other staff members recommend that, as this is a measurement under conditions of uncertainty, a probability-weighted best estimate approach would provide the most useful information to users.

Question for the Boards

Q7: Which approach to measurement do the boards prefer?

Residual Value Guarantees

99. Under a residual value guarantee, the lessee will compensate the lessor if the value of the leased item at the end of the lease falls below a specified value. A residual value guarantee may require the lessee to purchase the property for a certain or determinable amount or make up a deficiency below a stated amount at termination of the lease. Residual value guarantees and rental payments both represent potential cash outflows for the lessee. Generally, a higher guaranteed residual value will result in lower rental payments as the guaranteed residual reduces the lessor's risk at the end of the lease term.

100. Under existing accounting standards, the maximum amount payable under a residual value guarantee is included in the minimum lease payments. The maximum amount is included regardless of whether the maximum exceeds any reasonable estimate of a deficiency that might be expected to rise in normal circumstances. Consequently, if a lease is classified as a finance lease,

the liability recognised by the lessee includes the present value of the maximum amount payable under the guarantee.

101. Under US GAAP, residual value guarantees are excluded from the scope of FIN 45 when the lease is classified as a capital lease because the lessee has already recorded the maximum amount of the guarantee. In addition, although a residual value guarantee could meet the definition of a derivative under Statement 133, residual value guarantees that are subject to the leasing literature are scoped out of Statement 133. Under IFRS, residual value guarantees embedded in lease contracts are normally accounted for in accordance with IAS 17 rather than IAS 39 or IFRS 4.

Residual Value Guarantees - Recognition

102. The boards' could decide to require separate recognition of residual value guarantees. The boards' could also decide to only recognise an obligation to make payments under the residual value guarantee if payment is probable. However, this would be inconsistent with the boards' tentative decisions to adopt a single unit of account approach for optional periods and contingent rentals. It also would be inconsistent with the boards' preliminary view that the assets and liabilities recognised by the lessee should reflect the obligation to make contingent rental payments.

103. Similar to contingent rental payments, although the amount of a residual value guarantee payment that the lessee would make is conditional on future events, the obligation to make the payment if the specified future events occur is unconditional. As such, the staff can see no reason why the boards would establish a different recognition threshold for residual value guarantees as compared to the obligation to make contingent rental payments.

104. Residual value guarantees, from the lessor's point of view, are a source of cash inflow from a lessee that is no different from a rental payment. Presumably, a lessor would be indifferent between receiving a large amount of fixed rentals with no residual value guarantee or a small amount of fixed rentals with a large guaranteed residual value. As such, the staff recommend that the initial assets and liabilities recognized by the lessee should reflect the obligation to make payments under a residual value guarantee.

Question for the Boards

Q8: Do the Boards agree with the staff's recommendation that the initial assets and liabilities recognized by the lessee should reflect the obligation to make payments under a residual value guarantee?

Residual Value Guarantees - Measurement

105. The following represent the approaches for measuring the lessee's obligation under a residual value guarantee (as part of the initial measurement of the right-to-use asset and obligation to pay rentals). As the advantages and disadvantages of the various "best estimate" approaches will be substantially the same as those described in the discussion of measurement of options and contingent rentals, the staff will simply emphasize some of the advantages and disadvantages as they relate to residual value guarantees within this section.

Current Approach

106. The boards could continue to require the current approach to residual value guarantees in the new lease accounting standard. However, requiring measurement based on the maximum amount payable is inconsistent with the boards' tentative decisions to include a best estimate of contingent rentals and optional periods in the liability. In addition, in many cases it may be difficult to distinguish between a residual value guarantee and a contingent rental. For example, consider an arrangement in which the lessee is required to make up a residual value deficiency that is attributable to excessive usage (for example, excessive mileage on a leased vehicle). In this situation, it is unclear how a residual value guarantee would be substantially different from the lessor charging an additional amount of rentals for each mile over a specified amount.

107. The current approach would also be inconsistent with a probability-weighted estimate approach as there would be situations in which the lessee does not expect to pay the full amount of the residual value guarantee.

108. A disadvantage to moving away from the current approach is that it would allow a lessee's estimate of the residual value to potentially reduce the obligation recorded under the new approach as compared to the current leasing literature. A lessee might have optimistic assumptions about the estimated

residual value of the equipment that would presumably be reflected in their best estimate of the obligation. However, this concern would presumably be mitigated by a lessee being required to provide evidence to support the reasonableness of their residual value assumptions. In addition, a requirement to reassess the estimated residual value guarantee payment could also mitigate this concern.

109. Another example of how a new approach could differ from the current approach is a lease that includes a full guarantee of the expected residual value at the end of the lease. Under the current literature, this lease would be classified as a finance lease. The full value of the asset would be recognised in the balance sheet (along with an obligation to pay for that asset). Under any of the other approaches to measurement discussed in this paper, the amount recorded would reflect the amount the lessee may pay under the guarantee. As a result the recognised asset and liability will be less than what is recorded under the current approach.

Best Estimate

110. This approach would require the lessee to make their best estimate of the amount they will be required to pay the lessor under a residual value guarantee. This amount would be included in the initial measurement of the right-of-use asset and the lessee's obligation to pay rentals.

111. The advantages and disadvantages of this approach are the same as those listed in the Measurement of Contingent Rentals section of this memo.

Best Estimate – Most Likely Payment Amount

112. This approach would define the "best estimate" of the estimated payment under a residual value guarantee as the payment amount that the lessee believes is most likely to occur. The advantages and disadvantages of this approach are the same as those listed in the Measurement of Contingent Rentals section of this memo.

Probability-weighted best estimate (Expected outcome technique)

113. The advantages and disadvantages of this approach are the same as those listed in the Measurement of Contingent Rentals section of this memo.

Staff Recommendation

114. Some staff members recommend that the initial measurement of the right-of-use asset and the lessee's obligation to pay rentals should be based upon the lessee's best estimate of the amount they will be required to pay under a residual value guarantee. Best estimate should be described as the payment amount that the lessee believes is most likely to occur.

115. Some staff members recommend that, as this is a measurement under conditions of uncertainty, a probability-weighted best estimate approach to measurement would provide the most useful information to users.

Question for the Boards

Q9: Which approach to measurement to the boards support?