30 Cannon Street, London EC4M 6XH, United Kingdom
Tel: +44 (0)20 7246 6410 Fax: +44 (0)20 7246 6411
E-mail: iasb@iasb.org Website: www.iasb.org

International Accounting Standards Board

This document is provided as a convenience to observers at IASB meetings, to assist them in following the Board's discussion. It does not represent an official position of the IASB. Board positions are set out in Standards.
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: **March 2009, London**

Project: **Revenue Recognition**

Subject: **Effects of the time value of money (Agenda paper 6A)**

OBJECTIVE OF THE PAPER

1. In developing a proposed revenue recognition model to date, the boards have ignored the time value of money for simplicity. However, performance by an entity (ie satisfaction of a performance obligation) and payment by its customer can occur at different times over the life of a contract. Hence, an entity's net contract position can contain a financing component.

2. This paper considers whether and how the carrying amount of an entity's net contract position should reflect the time value of money.

3. Although the papers for this meeting focus on the measurement of the rights in a contract, this paper also considers the effect of time value of money on an entity's performance obligations. That is because the paper considers the financing component implicit in the transaction price and the transaction price is the basis of measuring both the rights and performance obligations in an entity's net contract position.

SUMMARY OF RECOMMENDATIONS

4. The staff recommends:

    a. Conceptually, the carrying amount of an entity's net contract position should reflect the time value of money.

b. Practically, the carrying amount of an entity's net contract position needs to reflect the time value of money only if payment by the customer and performance by the entity differ by approximately one year or more.

c. The discount rate used to reflect the time value of money should be the rate at which the entity and its customer would have entered into a financing transaction independent of providing goods and services under the contract.

d. The interest income or expense on the net contract position should be presented as a component of revenue.

5. The basis of the staff recommendations is discussed in the following sections of the paper:

   a. should the carrying amount of an entity's net contract position reflect the time value of money? (paragraphs 6 – 15);

   b. when should the time value of money be reflected? (paragraphs 16 – 24);

   c. how should the effect of the time value of money be reflected? (paragraphs 25 – 30);

   d. what interest rate should be used? (paragraphs 31 – 38);

   e. how should the effects of the time value of money be presented in the financial statements? (paragraphs 39 – 45).

SHOULD THE NET CONTRACT POSITION REFLECT THE TIME VALUE OF MONEY?

6. The effects of the time value of money are not apparent in most contracts with customers because there is an insignificant difference in timing between the transfer of goods and services to the customer, and payment for those goods and services. Hence, in most contracts there is no need to consider the effects of the time value of money.

7. However, in some circumstances, there is an apparent financing component in the transaction. Consider the following example:

> Customer buys computer hardware from a computer retailer ('Retailer') and negotiates payment terms of 12 months after delivery.

8. In this example, Retailer rationally would set a contract price that compensates it for both providing the computer hardware and having to wait 12 months to be paid. Therefore, Customer could be viewed as paying the retailer interest (implicitly) for the benefit of paying in the future. All other things being equal, Customer would expect to pay more (nominally) for the goods than a customer who pays cash on delivery.

9. Consider the example above, but Customer pays 12 months in advance of receiving the hardware. In this scenario, Retailer could be viewed as implicitly

paying Customer interest, for the benefit of having use of Customer's money for 12 months. All other things being equal, Customer would expect to be given a discount for paying upfront compared with a customer who pays cash on delivery, because it would have earned a return on the money if it had been otherwise invested.

10. In both fact patterns, the contract contains an implicit financing component. In other fact patterns, the financing component might be explicit (eg customer obtains a loan from the entity to fund the transaction). Whether the financing component is implicit or explicit, the question is whether to account for that component separately from the revenue for the other goods and services.

11. Arguments against accounting for the financing component separately are as follows:

    a. Increased complexity—reflecting the time value of money in the carrying amount of the net contract position increases the complexity of the measurement approach.

    b. Potential confusion for users—it may be confusing to recognise interest on the net contract position, particularly interest expense on a contract liability, if the revenue contract does not explicitly bear interest.

    c. Increased subjectivity—scheduling estimated inflows and outflows under the contract and determining a discount rate introduces additional subjectivity. That would reduce comparability and permit earnings management.

    d. Inconsistency with accounting for discounts—typically if a trade discount is given to a customer, revenue is recognised net of the discount provided. It could be argued that negotiating a lower price with a customer as part of the financing structure of the contract is akin to providing the customer with such a trade discount. Therefore, it should be accounted for in the same way, without any gross up of the revenue amount to account for the financing element.

    e. It ignores the effect of any related work-in-progress in a construction or manufacturing-type contract in which control of that WIP does not transfer to the customer during the construction or manufacturing phase. in other words, reflecting interest only on the net contract position would not depict that the customer is in effect financing the WIP in such contracts. (The Appendix to this paper illustrates this point.)

12. Arguments for accounting for the financing component separately are as follows:

    a. Comparability—entities are not indifferent to the timing of the cash flows in a contract; therefore reflecting the time value of money portrays an important economic phenomenon in the contract. A transaction in which the customer pays for a good or service when that good or service is provided is different from a transaction in which the customer pays before or after the good or service is provided. Even if an entity charges its

customer the same nominal amount in both cases, it has, in fact, charged the same amount for a different bundle of goods and services (if finance is included) in each case. Hence to be useful to users, the accounting should reflect those differences.

b. Faithful representation—not recognising the financing component could misrepresent the *profit* recognition of a transaction. For example, if the financing component is ignored and a customer pays in advance, the entity will recognise gains (in the form of interest earned on the cash received) from the contract before any good or service is provided to the customer. In effect, this front-ends the recognition of profit from the contract. That is because rationally that interest was received in compensation of accepting a lower price on the good or service. Similarly, if a customer pays in arrears, ignoring the finance component of the transaction would result in full profit recognition on delivery of the good or service, despite the ongoing cost to the entity of providing financing to the customer.

c. Reasonableness of estimates—in practice, it should be possible for entities to schedule inflows and outflows under the contract and determine an appropriate interest rate in a sufficiently reliable and objective way at a reasonable cost. Although there would be subjectivity, the accounting should be within a reasonably narrow range. Estimates are used extensively in financial statements and there is no reason under the boards' conceptual frameworks why estimates affecting revenue need to pass a higher hurdle of verifiability. Indeed, estimates are used extensively today in revenue accounting.

d. Current literature explicitly addresses the issue:

IAS 18 *Revenue* states that if the arrangement 'effectively constitutes a financing transaction', the fair value of the consideration must be determined by discounting all future receipts using an imputed rate of interest. Similarly in US GAAP, if products are sold on extended payment terms, and collection is reasonably assured, APB 21 *Interest on Receivables and Payables* states that the receivable and the revenue be recognised at the present value of the payments, and a portion of the payments be attributed to interest income.

IAS 18 does not directly discuss situations in which customers pay in advance. However, if the time value of money is reflected when the entity implicitly provides the customer with a loan, then logically the same reasoning could be applied when the entity in effect takes a deposit from the customer.

IFRSs require discounting on comparable items, for instance IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* reflects the time value of money in the measurement of liabilities.

In FAS 163 *Accounting for Financial Guarantee Insurance Contracts*, the FASB considered it appropriate to reflect the time value of money in accounting for a financial guarantee insurance contract.

e. If an entity has satisfied all of its performance obligations, its contract asset is a financial asset that otherwise would be accounted for in accordance with IAS 39 *Financial Instruments: Recognition and Measurement* and the accounting therefore would reflect the time value of money (if material). Hence, it would be odd to ignore the time value of money in a contract that otherwise is identical except that there remains an outstanding performance obligation.

Input from users

13. The staff have consulted some users about whether to account separately for any finance component in a revenue contract. Most of those users acknowledge the conceptual basis for reflecting the effect of the time value of money. Some commented that, for some industries, reflecting the implicit interest effect separately could provide useful information about the economic reality of a business. For instance, one user noted that in the oil and gas extraction industry, large advance payments from customers are the norm, due to the timing and risk of the activities involved. In those scenarios, the user thought it would be beneficial to show the implicit finance effects separately.

14. However, many of the users raised concerns about introducing subjectivity into the revenue line, as noted above in paragraph 11c. Many of the users also noted that, in most instances, the information would not be cost beneficial for the preparers to provide (an issue considered in the next section).

Conclusion

15. Despite concerns about introducing subjectivity into revenue accounting, the staff thinks that the carrying amount of an entity's net contract position should reflect the time value of money. In an economic sense, there is a difference between transactions in which payment and performance happen at roughly the same time, and transactions in which they do not. Furthermore, since this issue is already dealt with in existing standards, the staff thinks it cannot be ignored in developing the new revenue recognition standard.

QUESTION 1

Do you agree that, in concept, the carrying amount of an entity's net contract position should reflect the time value of money?

WHEN SHOULD THE TIME VALUE OF MONEY BE REFLECTED?

16. Having concluded that the carrying amount of an entity's net contract position should reflect the time value of money, the boards need to consider whether an entity should:

    a. always reflect the effects of the time value of money (subject to materiality), or

    b. specify the circumstances in which an entity should reflect the time value of money.

Always reflect the effects of the time value of money

17. This option would suggest that the time value of money is reflected in the carrying amount of the contract position whenever its effect would be material. That would be a principled approach and avoids creating a bright line.

18. However, although an entity would not have to reflect the time value of money if its effect is immaterial, this option could be unduly burdensome on an entity. That is because the entity would have to establish the interest component in the contract before concluding whether it is material. For the vast majority of transactions the financing component is likely to be immaterial and not cost beneficial to reflect. That was also the view of the users we consulted.

Specify the circumstances in which an entity should reflect the time value of money

19. Another option would be to specify that the time value of money is reflected in the carrying amount of the net contract position only in specified circumstances. The staff thinks that there are two possible approaches:

    a. Require that it should be reflected when payment is due more than a specified period earlier or later than performance.

    b. Require that it should be reflected when the payment terms fall outside of the customary terms for that transaction in the jurisdiction in which it is concluded.

Reflect time value of money when payment is due more than a specified period earlier or later than performance

20. The staff think that the obvious period to use would be approximately twelve months or more. There are various precedents for specifying this period:

    a. IAS 19 *Employee Benefits* uses a twelve month period to define short term employee benefits that, in contrast to other employee benefits, are not discounted.

    b. IAS 1 *Presentation of Financial Statements* paragraph 61 uses twelve months to distinguish current and non-current assets and liabilities.

    c. US GAAP's APB 21 *Interest on Receivables and Payables* excludes those '...transactions with customers or suppliers in the normal course of business which are due in customary trade terms not exceeding approximately one year'. The approximately one year scope limitation is thought to have been included as a matter of practicality and convenience, so as not to require discounting of receivables or payables when the effect would be insignificant.

21. The boards should note that this approach would require discounting for any prepaid warranty-type contract exceeding one year.

Reflect time value of money when the payment terms fall outside of the customary terms for that transaction in the jurisdiction in which it is concluded.

22. 'Normal' payment terms can vary greatly between countries, as a result of legal and *cultural* differences. For instance, in some countries (eg Italy and India) it is not uncommon for payment terms to exceed one year. In those countries, more of an entity's transactions would be caught by the approach in paragraph 19a. Hence, some might argue that that approach is not sensitive to the different ways that entities conduct business around the world.

Conclusion

23. The staff recommend that the boards specify the circumstances in which an entity should reflect the time value of money. We think that is consistent with the boards' approach to date in developing the measurement approach—ie to specify general measurement requirements that are appropriate for the vast majority of revenue contracts.

24. Of the two alternatives in paragraph 19, the staff recommends the first—ie that time value of money should be reflected when payment is due approximately one year or more before or after performance. We think this will result in greater comparability between companies and across borders, which could be lost if the decision is left up to transactions falling outside 'normal' payment terms.

QUESTION 2

Do you agree with specifying the circumstances in which an entity should reflect the time value of money? If so, do you agree that it should be when payment is due approximately one year or more before or after performance?

HOW SHOULD THE EFFECT OF THE TIME VALUE OF MONEY BE REFLECTED?

25. In those cases in which there is an implicit financing component in the transaction, the transaction price can be regarded as a composite figure consisting of (a) the cash selling price for the goods and services (assuming that there is no discount to the cash selling price agreed with the customer for any other reason) and (b) a financing component, either interest from the customer or to the customer.

26. Hence, the financing component of the transaction price needs to be identified. In this way, when the performance obligation is satisfied, the amount of revenue recognised is the amount of the transaction price less the financing—in effect, the cash sales price of the underlying good or service. In other words, the amount of the transaction price that is allocated to the performance obligations should be the nominal amount of the transaction price, adjusted for the financing component. Interest income or expense is then recognised on the contract asset or contract liability.

27. To illustrate, consider the example introduced earlier in the paper.

Customer buys computer hardware from a computer retailer ('Retailer') and negotiates payment terms of 12 months after delivery.

28. Suppose the transaction price is CU1,000. Further suppose that the financing rate is 6% (what rate to use is discussed below). When Retailer satisfies its performance obligation immediately after inception, it recognises revenue of CU943 (CU1,000/1.06). It then recognises interest *income* of CU57 over the next 12 months (ie CU943 × 6%).

29. Similarly, suppose Customer pays a transaction price of CU898 at contract inception, 12 months before delivery. Further suppose that the financing rate is 5% (again, what rate to use is discussed below). At contract inception, Retailer recognises a contract liability of CU898 for its remaining performance obligation. It then recognises an interest *expense* of CU45 over the next 12 months. Therefore, immediately before the performance obligation is satisfied (12 months after inception), the carrying amount of the contract liability is CU943. This is the amount of revenue that is recognised when Retailer satisfies its performance obligation.

30. At this point it is worth noting that, until either party performs, the contract position remains at nil. This means that there would be no interest effects until either the customer pays and the entity's performance is outstanding, or the entity performs and is waiting to be paid. The staff thinks this is consistent with the boards' conclusions in the discussion paper.

WHAT INTEREST RATE SHOULD BE USED?

31. In some cases, there is an explicit financing rate in the contract. For instance, suppose in the above example, Retailer is offering 1% finance, so that it charges Customer the 'list price' of the computer hardware plus 1% interest. Should that rate be used?

32. In the staff's view, one of the main objectives for reflecting the time value of money in the net contract position is to ensure an appropriate recognition of profit over the life of the contract. In this example, using the rate stated in the contract would not be consistent with that objective. In effect, Retailer is using the offer of 'cheap' finance as a marketing incentive. Hence, the staff thinks that the explicit rate should be disregarded and a more 'commercial' rate used. In that way, the discount is applied to the computer hardware rather than the finance. The staff notes that this approach is consistent with the approach for manufacturer or dealer lessors in IAS 17. (IAS 17 states that 'if artificially low rates of interest are quoted, selling profit shall be restricted to that which would apply if a market rate of interest were charged'.)

33. The staff thinks that when the customer is paying in arrears, the entity implicitly is providing a loan to its customer. Conceptually, therefore, the staff thinks that the rate used should be that which reflects the customer's credit standing. Conversely, when the customer pays in advance, the entity has implicitly taken a deposit from the customer. Conceptually, therefore, the rate used should reflect the credit characteristic of the liability (and so would typically reflect the entity's credit standing).

34. However, the staff is wary of making this issue too complex. For that reason, the staff considered whether an entity should use the risk free rate if it needs to impute interest. In that regard, the staff notes that FAS 163 concludes, for practical reasons, that the current risk-free rate should be used when measuring the future insurance premiums. It noted that this rate is observable, simple to apply and avoids the costs of determining a rate based on each individual customer's credit standing.

35. As noted above, some users are sceptical about separating the financing components in a revenue contract. Given that scepticism, it could be argued that requiring entities to use the risk free rate (when the effect of the time value of money is material) would not be very useful to a user, because the resulting derived interest component would not be particularly meaningful. The risk free rate would not reflect the parties to the transaction being accounted for.

36. Accordingly, the staff recommends that the objective when choosing a rate should be for an entity to approximate the rate at which it and its customer would have entered into a financing transaction, independent of providing goods and services under the contract. That rate would reflect the characteristics of the parties to the contract.

37. Therefore in meeting this objective, the entity could either:

    a. identifies the rate of interest by discounting the nominal amount of the transaction price to the cash sales price of the good or service at contract inception (in other words, interest is the residual), or

    b. directly imputes an interest rate to identify the amount of the transaction price to be allocated to the good or service in the contract (in other words, the revenue for the goods and services is the residual),

    depending on which approach is most consistent with the overall objective.

38. This approach to determining the finance components is similar to that in IAS 18 (paragraph 11).

QUESTION 3

Do you agree that the discount rate should be the rate at which the entity and its customer would have entered into a financing transaction?

HOW SHOULD THE EFFECTS OF THE TIME VALUE OF MONEY BE PRESENTED IN THE FINANCIAL STATEMENTS?

39. Under existing financial statement presentation principles, an entity would be likely to report any interest income on a contract asset as interest revenue, and any interest expense on a contract liability as a finance cost.

40. Considering the Discussion Paper *Preliminary views on Financial Statement Presentation* currently out for comment, an entity would be more constrained in

where to present the time value effect in the statement of comprehensive income. As a result, disclosure by different entities should be more consistent.

41. Contract assets and liabilities are likely to be classified under the business section (operating assets and liabilities) of the statement of financial position. Consequently, all changes in contract assets and liabilities would need to follow that classification in the business section in the statement of comprehensive income (operating income and expenses).

42. Although an entity would present all of the components of the change in the contract asset or contract liability in one category in its statement of comprehensive income, it could present those changes on two or more lines in that category, if that would assist users.

43. Hence, any interest component could be reported separately in the statement of comprehensive income as contract financing.

44. One option would be to present the contract financing as a component of the revenue figure in the statement of comprehensive income as follows:

Total revenue	XXX
- revenue from providing goods and services	XXX
- contract financing	XX

45. Alternatively, total revenue could be disclosed on the face of the statement of comprehensive income, and the breakdown between revenue from goods and services and contract financing could be provided in the notes to the financial statements, along with any further disclosure thought necessary in this regard. However, disclosure is a subject for a future meeting.

QUESTION 4

Do you agree with reflecting the finance effect as a component of revenue (either on the face of the statement of comprehensive income or in the notes)?

APPENDIX

NON-CONTINUOUS SATISFACTION OF CONSTRUCTION AND MANUFACTURING TYPE PERFORMANCE OBLIGATIONS

A1 The staff notes that in the proposals above, the interest recognised is based on the entity's net contract position. Hence, a construction or manufacturing-type contract does not take into account any work-in-progress of the entity. For instance, consider the following example:

> On 2 January 20X0, Manufacturer contracts to build a machine for Customer for CU1,000,000. Customer pays in full in advance. Control of the machine does not pass to Customer until the machine is complete on 2 January 20X1. Hence, revenue is recognised only on 2 January 20X1.
>
> Manufacturer incurs labour and material costs evenly over 20X0 as it builds the machine.

A2 In this example, following the proposals above, Manufacturer would initially recognise a contract liability of CU1,000,000 and recognise interest on that liability over the year's construction. Hence, the interest in December 20X0 would be more than in January 20X0.

A3 Some argue that that pattern of interest would not reflect the underlying economic reality. That is because as Manufacturer incurs time and material costs, Customer's advance could be regarded as steadily reducing.

A4 However, the staff notes that the boards have drawn a distinction between a continual delivery construction/manufacturing-type contract—ie a contract in which the performance obligation is satisfied continuously because the WIP is the customer's asset—and one in which the performance obligation is satisfied only at the end of construction/manufacturing.

A5 In the above example, Customer receives nothing under the contract until 2 January 20X1 (which is why no revenue is recognised until that time). Therefore, consistently with that, it seems appropriate that Customer is viewed as having paid an advance on which interest is accrued on the full amount, rather than an advance that reduces over time as Manufacturer incurs costs. In other words, the customer's prepayment is regarded as general financing for the entity rather than financing the specific machine.