IASB meeting | Agenda reference **8A**

Staff Paper | Date **September 2009**

Project **Liabilities—amendments to IAS 37**

Topic **Measurement guidance for service obligations**

Paper overview

1. This paper discusses proposed guidance on measuring obligations—such as asset retirement obligations—that are fulfilled by undertaking a service at a future date.

2. At the July Board meeting, Board members reopened discussions about an earlier tentative decision. The earlier tentative decision was to require entities to measure these service obligations by reference to the amount they would rationally pay a subcontractor at the future date to undertake the service. In the absence of an efficient subcontract market, the entity would have to estimate this amount by estimating the amount it would charge another party to undertake the service.

3. It was clear from the discussions in July that a significant number of Board members have concerns about the earlier decision. This paper reviews the position and proposes that the Board amend the guidance for situations in which there is not an efficient subcontract market.

This paper has been prepared by the technical staff of the IASB for the purposes of discussion at a public meeting of the IASB.

The views expressed in this paper are those of the staff preparing the paper and do not purport to represent the views of any individual members of the Board or the IASB.

Decisions made by the Board are reported in IASB *Update*.

Official pronouncements of the IASB are published only after the Board has completed its full due process, including appropriate public consultation and formal voting procedures.

Background

4. To date, the Board has decided tentatively that:

   (a) an entity should measure a liability within the scope of IAS 37 at the amount it would rationally pay at the end of the reporting period to be relieved of the present obligation.

   (b) the amount an entity would rationally pay to be relieved of the present obligation is the lower of:

      (i) the value the entity would gain if it did not have to fulfil the obligation (an entity-specific measure); and

      (ii) the amount the entity would have to pay the counterparty to cancel the obligation or a third party to transfer the obligation.

   (c) if there is no evidence that the entity could cancel the obligation or transfer it to a third party, the entity measures the obligation at the value it would gain if it did not have to fulfil the obligation.

5. As some Board members pointed out, the phrase 'the value the entity would gain if it did not have to fulfil the obligation' is cumbersome, and possibly confusing. The staff have used it to avoid saying 'the cost of fulfilling the obligation', which implies that the measure is necessarily based on the cost, not the value, of the resources that the entity will have to sacrifice. The staff are trying to identify better expressions and will present them for the Board to consider in due course.

6. The Board has considered how an entity would estimate the value it 'would gain if it did not have to fulfil the obligation'. Board members have supported the notion that entities could use an expected present value estimation technique that would take into account :

   (a) the value to the entity of avoiding the future outflows of resources;

   (b) the value of avoiding the risk in the amount or timing of the outflows; and

   (c) the time value of money.

7. However, Board members have not yet agreed how the entity should measure the first of these three building blocks, ie the value of avoiding the outflows of resources.

8. The disagreement arises only in relation to 'service obligations'. These are obligations, such as asset retirement obligations, that the entity fulfils by undertaking a service for (rather than paying cash to) the counterparty.

9. At its meeting in April 2009, the Board decided tentatively that:

> … the relevant cash flows are the amounts that the entity would rationally pay a contractor to undertake the service on its behalf. In the absence of an efficient market for those services, the entity could estimate the amount it would rationally pay a contractor by estimating the amount it would itself charge another party to carry out the service. The latter amount would include the entity's estimates of the costs it expects to incur in fulfilling the obligation and the compensation it requires for providing the service inherent in the obligation.[1]

[1] IASB *Update*, April 2009

10. However, at the July meeting, a number of Board members raised concerns about this earlier tentative decision. Some Board members suggested limited amendments, with the following wording being proposed:

> If the entity expects to fulfil the obligation by undertaking a service (such as environmental decontamination) at a future date, the entity would estimate the value of avoiding the future cash outflows by estimating the amount that it would be willing to pay a contractor at the future date to undertake the service. If an efficient market exists for such services, the amount ~~c~~would be the price that a subcontractor would charge. If there is not an efficient market, the amount would be the minimum price that the entity estimates it would itself rationally charge another party to undertake the service.

11. The Board did not reach any decisions but asked the staff to consider the suggested amendments and draft alternative recommendations.

Differences in views between Board members

12. There are two different views among Board members about the April decision.

Supporters of the April decision

13. Those who support the decision have argued that:

    (a) it is the correct interpretation of the proposed requirement. The requirement is to estimate the amount the entity would pay to be relieved of the obligation. If an entity has an obligation to undertake a service in future, the amount that it be willing to pay to avoid that obligation would reflect the value—not just the cost—of the resources sacrificed to fulfil it. The value of these resources could be estimated by considering what an entity would pay or charge another party for them

    (b) all of the activities that an entity undertakes are necessary for it to generate revenue and create value for the business. For example, to produce oil, an entity must construct, operate and decommission an oil rig. The entity should attribute the value it creates to all of these activities – not just the activities that have been completed when it delivers oil to customers. Future obligations should not be measured at cost.

    (c) a requirement to estimate the amount that the entity would pay a subcontractor to undertake the service will improve comparability by imposing a degree of market discipline on the measurements. At present, entities include different costs in their estimates of future cash flows, with some accounting for only marginal costs. The Board could address these inconsistencies by providing rules on which costs (direct costs, overheads, finance costs?) entities should include. But without an underlying measurement objective, these rules would be essentially arbitrary and could lead to calls for further interpretation.

Opponents of the April decision

14. Board members who oppose the April decision object most to the proposal that, in the absence of a subcontract market for the services:

    (a) the entity should estimate its liability on the basis of the amount it would itself charge another party to undertake the service; and

    (b) this amount would include the entity's estimates of its costs and the 'compensation it would require' for providing that service.

15. These Board members have argued that:

    (a) this amount includes profit, which would be recognised as a gain when the entity fulfils the obligation. This is not appropriate if the entity does not actually receive any revenue for performing these activities. Non-revenue liabilities should be measured at the cost of fulfilling them.

    (b) in the absence of a market for such services, an entity's estimates of the 'compensation it would require' for providing the service would be difficult to define, subjective and open to manipulation. The resulting measurement would not be reliable.

    (c) the Board does not need to specify subcontractor prices to overcome current divergence in practice and impose discipline on measurements. Instead it could provide guidance in IAS 37 on the costs that ought to be included. IAS 2 *Inventories*[2] and IAS 23 *Borrowing Costs* provide guidance on the costs that should be included in measurement of inventories. IAS 16 *Property, Plant and Equipment* cross refers to this guidance in relation to costs of self-constructed assets[3]. IAS 37 could do something similar.

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[2] Paragraphs 10-18.
[3] IAS 16, paragraph 22.

Possible ways forward.

16. There are two ways in which the Board could address the concerns expressed in paragraph 15.

Option 1—be more prescriptive about how value is estimated

17. The first option would aim to address the concern articulated in paragraph 15(b), ie that in the absence of subcontractors, measurements would be subjective and unreliable.

18. The Board could address this concern by being more specific about how entities should estimate the amount that they would pay a subcontractor in the absence of a subcontract market. Guidance could require entities to include:

    (a) the direct costs (labour, materials, equipment hire etc) expected to be required to fulfil the service;

    (b) a systematic allocation of fixed and variable overheads; and

    (c) the entity's required return on capital employed (which would take into account any risks associated with undertaking the service).

Option 2—Require entities to measure services at cost

19. A second option would be to change the objective to one of measuring the *cost* rather than the value of the cash outflows. The 'cost' would include overheads and finance costs that can be capitalised applying IAS 23. But they would not include any additional margins for service.

20. This option would not necessarily require the Board to drop the subcontractor notion completely—the standard could specify that, if an efficient subcontract market existed for the service, the entity should estimate its costs on the assumption that it will subcontract the service. In other words, the subcontractor price would serve as a readily verifiable estimate of cost.

Staff conclusions and recommendation

21. For the reasons set out in paragraph 13, the staff think that IAS 37 should require entities to measure service obligations on the basis of the value of the services, rather than just their cost. For this reason, the staff recommend the first of the two options discussed above.

22. The staff suggest the following wording, which is based on the wording discussed in July (see paragraph 10):

> If the obligation is fulfilled by undertaking a service at a future date, the relevant future outflow is the amount the entity would rationally pay a contractor at the future date to undertake the service on its behalf:
>
> (a) if an efficient market exists for such services, the amount is the price that a contractor would charge.
>
> (b) if an efficient market does not exist, the ~~amount is the minimum price that the entity estimates it would itself rationally charge another party to undertake the service~~. the entity estimates the amount, taking into account:
>
> (i) direct costs (labour, materials, equipment hire etc) expected to be required to fulfil the obligation;
>
> (ii) a systematic allocation of fixed and variable overheads;
>
> (iii) the entity's required return on capital employed.

23. In the appendix to this paper, the staff have sketched simple examples illustrating broadly how we think these requirements could be applied to two different types of service obligation.

24. Finally, the staff note that, irrespective of the manner in which the Board resolves this issue, the revised IAS 37 measurement requirements will be significantly less ambiguous—and hence will lead to less divergence in practice—than the existing requirements. Specifically, the revised requirements and guidance will clarify that:

    (a) the objective is to measure the amount that the entity would pay to be relieved of the liability today, not to predict the future outcome.

    (b) hence, the liability should be estimated on the basis of the probability-weighted expected outflows, not the most likely outcome.

    (c) if the entity could cancel or transfer the obligation for a lower amount than the burden of fulfilling the obligation, it measures the liability at the lower amount.

    (d) if the liability is estimated on the basis of the burden of fulfilling the obligation, the entity should include all the direct costs and an allocation of overheads, not just marginal costs.

Recommendation: measurement of service obligations

The staff recommend that guidance in IAS 37 should state that:

(a) if an obligation is fulfilled by undertaking a service at a future date, the relevant future outflow is the amount the entity would rationally pay a contractor at the future date to undertake the service on its behalf:

(b) if an efficient market exists for such services, the amount is the price that a contractor would charge.

(c) if an efficient market does not exist, the entity estimates the amount, taking into account:

   (i) direct costs (labour, materials, equipment hire etc) expected to be required to fulfil the obligation;

   (ii) a systematic allocation of fixed and variable overheads;

   (iii) the entity's required return on capital employed.

Do you agree?

Appendix – Illustrative examples

25. This appendix sets out examples illustrating how the proposed measurement requirements for IAS 37 would apply to (1) an asset decommissioning obligation and (2) extended warranty agreements. The latter are 'revenue' obligations, which will not remain within the scope of IAS 37. But example 2 has been included to show how the IAS 37 model would apply if extended to such transactions.

Example 1A Oil rig decommissioning obligation – entity could subcontract the work

26. An oil company places an offshore oil rig into service. The entity is required by law to dismantle and remove the rig at the end of its useful life, which is estimated to be 10 years.

27. The entity is unable to cancel the obligation or transfer it to a third party. Therefore it estimates the amount that it would rationally pay to be relieved of the obligation by estimating the value it would gain if it did not have to decommission the rig. It estimates this value using expected present value techniques.

Expected outflows

28. Although the entity could not lay off the obligation for future decommissioning, it could subcontract the work when the time comes for the decommissioning to take place. The entity estimates that to decommission the oil rig today a contractor would charge 125,000 currency units (CU 125,000).

29. Using this estimate and making assumptions about future changes in prices and the possible effects of new technology, the entity estimates a range of possible prices that a contractor would charge in 10 years to undertake the same work:

Estimated outflows and associated probabilities

Outflow estimate	*Probability assessment*	*Expected cash flows*
CU	*%*	*CU*
200,000	25	50,000
225,000	50	112,500
275,000	25	68,750
		231,250

Adjustment for risk

30. The uncertainties associated with undertaking the decommissioning service today are reflected in the estimate of the price charged by a contractor (CU125,000). However, uncertainties surrounding future changes in prices and the possible effects of new technology over the next 10 years are not reflected in this price. The entity estimates that it would rationally pay an additional 5 per cent to avoid this risk in the future cash flows.

Time value of money

31. The discount rate that reflects current market assessments of the time value of money is 6 per cent per annum. (Risks specific to the liability are included by adjusting the cash flow estimates).

Measurement of obligation

32. The entity initially measures the obligation as follows:

	CU
Expected cash flows	231,250
Risk adjustment 5%	11,563
	242,813
Present value using discount rate of 6% for 10 years	135,586

Example 1B Oil rig decommissioning obligation – entity could not subcontract work

33. The circumstances are the same as those in Example 1A except that there is not an efficient market for the service of decommissioning oil rigs. The entity will have to fulfil the obligation itself.

34. The entity estimates the amount that it would rationally pay a contractor to decommission the oil rig today on the basis of the costs is would incur to fulfil the obligation and its required return on capital employed:

	CU
Direct costs (labour, material, equipment hire)	96,000
Allocation of overheads	23,000
Required return on capital employed	5,000
Expected cash flows	124,000

35. Having estimated the amount that it would rationally pay a contractor to decommission the oil rig today, the entity continues as in paragraphs 29 onwards in Example 1A.

Example 2 Extended warranty cover

36. An entity provides three-year extended warranty cover on domestic appliances. It measures its obligations separately for each type of appliance sold in each of the preceding three years.

37. This example illustrates how it would measure its obligation in respect of 1,000 agreements that it entered into between two and three years ago to cover a specific type of appliance.

38. On the basis of previous experience, the entity estimates that in the next year (ie the final year in which these appliances are covered):

    (a) there is a 20% probability that 40 of the appliances will need to be replaced and 120 will need repair.

    (b) there is a 75% probability that 50 of the appliances will need to be replaced and 150 will need repair.

    (c) there is a 5% probability that 150 of the appliances will need to be replaced and 150 will need repair.

Expected outflows

39. The entity could subcontract responsibility for repairing or replacing this particular appliance to a range of appliance repair contractors. The contractors would charge CU800 to replace, and CU100 to repair, an appliance.

40. The entity is also required to manage customer claims. There are several other entities in the market to which it could subcontract the claims management service. For appliances of this type and age, these service providers would charge approximately CU5 per annum per appliance covered.

Estimated outflows and associated probabilities

Outflow estimate	*Probability assessment (%)*	*Expected cash flows (CU)*
Repairs and replacements:		
(40 x CU800) + (120 x CU100)	20	8,800
(50 x CU800) + (150 x CU100)	75	41,250
(200 x CU800) + (150 x CU100)	5	8,750
		58,800
Claims management (1,000 x CU5)	100	5,000
		63,800

Adjustment for risk

41. Although the appliance repair contractor's prices are fixed, the number of appliances that will require repair or replacement is uncertain. The entity estimates that it would rationally pay an additional 3 per cent to avoid the risk that the outcomes and their associated probabilities are different from those it has estimated.

Time value of money

42. The entity estimates that the cash outflows will occur evenly during the following year, ie on average six months from the end of the reporting period. The discount rate that reflects current market assessments of the time value of money for a 6-month period is 2 per cent.

Measurement of obligation

43. The entity measures the obligation as follows:

	CU
Expected cash flows	63,800
Risk adjustment (3% x CU58,800)	1,764
	65,664
Present value using discount rate of 2%	64,278