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International Accounting Standards Board

INFORMATION FOR OBSERVERS

Board Meeting:	**22 June 2007, London**
Project:	**Extractive Activities research project**
Subject:	**Possible principles for a historical cost accounting model that accompanies decision-useful disclosures of minerals and oil & gas reserves and resources (Agenda Paper 15C)**

Purpose

1. The purpose of this paper is to identify an approach to accounting for exploration, evaluation and development activities that focuses on disclosure rather than recognition and measurement as the key method of providing decision useful information to financial statement users. The research project team proposes that the discussion paper resulting from the research project should include both a current value approach and a disclosure-focused approach.

Context

2. The results of the user survey (as discussed in Agenda Paper 15A) indicate that users of financial reports, or at least the relatively sophisticated users, would derive limited or no use from the balance sheet measurement of a minerals or oil & gas reserves and resources asset regardless of whether it is measured on a historical cost or current value basis. The users surveyed indicated that disclosure of reserves and resources

information which the user could apply to prepare their own estimate of value would instead provide decision useful information.

3. One possible result, therefore, might be for an accounting standard on extractive activities to focus on providing decision-useful information through disclosure requirements. Disclosures are part of every accounting standard and would exist if the future IFRS incorporated a current value accounting model. The difference in the alternative in this Agenda Paper is that the key requirements to meet users' needs would be the disclosure requirements. The disclosures would not primarily focus on providing information to understand the numbers in the income statement and balance sheet, but would themselves be the key source of information for users. This disclosure-focused approach would accept the findings of the user survey – that no method of accounting for reserves and resources is likely to provide much decision-useful information.

4. Under this alternative consideration still needs to be given to the accounting model. The accounting model could be either a historical cost model or a current value model. A brief description of a current value model is provided in Agenda Paper 15B. This Agenda Paper develops a similar description of a historical cost model for the exploration, evaluation and development costs incurred by mining and oil & gas companies.

5. This Agenda Paper therefore identifies some high level guiding principles and building blocks of a cost based measurement model so that the Board – and perhaps subsequently, respondents to the research project's discussion paper – can compare the merits and shortcomings of a current value measurement model and a cost based measurement model within the context of a disclosure-focused approach.

Why even consider a disclosure-focused approach?

6. Focusing on disclosures goes against the view that disclosure is not a substitute for recognition and measurement.[1] The project team does not disagree that appropriate accounting for transactions so that they are faithfully represented in the income statement, balance sheet and cash flow statement, in general, makes financial statements more useful than including the information in footnote disclosures. However, the

[1] See, for example, the discussion at paragraphs BC287-BC293 of the Basis for Conclusions to IFRS 2 *Share-based Payments*.

research project team believes that this is subject to being able to develop an accounting approach for transactions concerning pre-production costs that results in relevant information in the income statement, balance sheet and cash flow statement. It may be that no such accounting approach can be developed. If this is so, then the only alternative may be to focus on the disclosures. Given the near unanimity of the feedback from users on the lack of relevance of either historical cost or current value accounting for reserves and resources, the research project team believes a disclosure-focused approach needs to be considered as one alternative in the discussion paper.

Why account for extractive activities if it does not provide relevant information?

7. A logical conclusion from the results of the user survey might be that all extractive activities expenditures should be expensed. If balance sheet presentation does not provide useful information, then there is no reason to capitalise any of these costs.

8. Cost/benefit arguments might support this view. Current accounting methods such as full cost and successful efforts are often complex, involving sophisticated systems. Current value accounting would be more complex and likely to be more costly. Accounting processes are often complex and costly – but it is difficult to justify this complexity and cost if the resulting information is not of use. Expensing costs would be significantly lower cost than either current value or historical cost based accounting.

9. Costs that are currently capitalised by extractive companies (and mostly ignored by the users) include exploration, evaluation and development costs. Development costs include both costs of accessing the reserve and tangible assets such as production equipment, processing facilities and storage facilities. These tangible assets, in particular, are in many ways similar to items that are capitalised in all other industries.

10. Development costs are different from exploration and evaluation costs. They do not have the same speculative character and usually follow an intensive investment analysis process. The costs are often very large, both in terms of the life cycle cash flow of the property and for the company. Expensing these costs would significantly reduce reported income at a time when the development was adding value to the company. While sophisticated investors might adjust for this, less sophisticated investors might infer that the company's performance is deteriorating.

11. Expensing all extractive activity costs would negatively affect the understandability of the income statement and of net earnings. The IASB *Framework for the Preparation and Presentation of Financial Statements*, at paragraph 17, notes that "(i)nformation about the performance of an entity, in particular its profitability, is required in order to assess potential changes in the economic resources that it is likely to control in the future. Information about variability of performance is important in this respect. Information about performance is useful in predicting the capacity of the entity to generate cash flows from its existing resource base. It is also useful in forming judgements about the effectiveness with which the entity might employ additional resources." An accounting model that expenses amounts that benefit future periods rather than the current period distorts the information about performance provided by the income statement.

12. Clearly accounting is not perfect in this respect – it can be argued that expenditures on many internally generated intangible assets are expensed and that these intangible assets benefit future periods rather than the current period. Often the reason for expensing amounts is that their recoverability is uncertain. When the recoverability is reasonably assured, as it is with many extractive activities, then the expenditures should not be expensed.

Can historical cost be supported as an accounting method for extractive activities?

13. A disclosure-focused approach is based on the view that balance sheet information on reserves and resources is not useful to financial statement users. The argument for historical cost is not based on the balance sheet – it is based on providing an income statement that has some, perhaps modest, relevance to users in assessing performance.

14. This is not an easy argument to make. Companies in the extractive industries are generally valued based on their reserves, not on their current earnings. Nevertheless earnings appear to be important to investors. Companies are penalised by the market for earnings that are less than expectations. Users focus on net earnings, and some may not take the time or effort to understand what is behind them.

15. While historical cost accounting for extractive activities may not provide useful information about future cash flows, it does avoid "polluting" earnings in that it excludes from earnings amounts spent that will benefit the future. It therefore can be

argued to result in a more relevant income statement than if all costs were expensed and also to result in more understandable financial statements. This may be a slender benefit – but it should not be ignored.

16. While the users surveyed by the project team were focused on obtaining information to help them value the company and its major reserves and resources, there are those who also see stewardship as a key use of financial statements. This may be from the traditional perspective of management as a "steward" of resources entrusted to them by shareholders and being accountable for these resources. Others take the view that a stewardship perspective helps in assessing management competence and ability. Historical cost is viewed by many as the most useful measurement base for stewardship as it maintains the original investment as a basis for measuring performance. However, not all would agree with this.

Outline of a historical cost model

17. The guiding principles of any historical cost model to account for exploration, evaluation and development activities are that the accounting should:

    (a) adhere to conceptual accounting principles;

    (b) be comparable and consistent – that is, not provide free choice in determining which costs get capitalised and which get expensed; and

    (c) satisfy cost/benefit considerations, noting that users appear to attach limited or no usefulness to a historical cost measurement of reserves and resources (or for that matter, a current value measurement).

18. The remainder of this paper identifies and discusses some key building blocks of a historical cost measurement model that are consistent with these guiding principles. The building blocks identified include:

    (a) the unit of account should be narrowly defined;

    (b) pre-production costs should be capitalised after passing a specified project maturity hurdle;

(c) capitalised pre-production costs should include direct and indirect costs that are attributable to the unit of account;

(d) costs incurred prior to reaching this specified hurdle should be expensed (or written off) unless an asset would otherwise be recognised in accordance with the *Framework* or IFRSs (e.g. IAS 16 *Property, Plant and Equipment* or IAS 38 *Intangible Assets*); and

(e) subsequent measurement of the asset (i.e. the capitalised costs) via depreciation and impairment should be determined in accordance with the principles in existing IFRSs.

19. Please note that the guiding principles and building blocks presented in this paper have been proposed by the research project team for the purposes of starting the discussion on the design of a historical cost accounting model. Following this meeting, the research project team intends to commence consultations with users and its Advisory Panel on the design of a historical cost model.

Unit of account

20. Determining the unit of account (i.e. cost centre) that should apply in accounting for exploration, evaluation and development costs is a contentious issue. This was recently evidenced following the release of ED 6 *Exploration for and Evaluation of Mineral Resources* and before that in the development and release of FAS 19 *Financial Accounting and Reporting by Oil and Gas Producing Companies* in the USA. There are a myriad of arguments for and against the three main historical cost models that are commonly applied today in the minerals and oil & gas industries – being successful efforts, area of interest and full cost. How the unit of account is defined is central to each of these existing historical cost models.

21. The unit of account is important for the following reasons:

(a) it represents the lowest level for which information can be provided in the financial statements;

(b) depreciation – IAS 16 *Property, Plant and Equipment* defines depreciation as "the systematic allocation of the depreciable amount of an asset over its useful life".

The useful life for minerals or oil & gas assets is based on the reserve (or reserve and resource) volumes. The unit of account should allow for the determination of appropriate depreciation charges, noting that different properties will have different reserves and these reserves will be produced at different rates; and

(c) impairment – IAS 36 *Impairment of Assets* requires impairment to be assessed at the cash generating unit level. Therefore, the cash-generating unit effectively sets an upper limit on the unit of account.

22. In addition, the research project team believes that the unit of account should:

(a) be capable of being clearly defined; and

(b) not require significant cost apportionment or cost allocation.

23. In the research project team's opinion, this is likely to lead to the unit of account being narrowly defined. The reasons for this conclusion follow.

24. The IASC Steering Committee Issues Paper on Extractive Industries, November 2000, ("the 2000 Issues Paper"), at paragraph 6.3, lists a range of cost centres[2] that could be applied in a historical cost model:

(a) the world;

(b) each country or group of countries in which the enterprise operates;

(c) each contractual or legal mineral acquisition unit, such as a lease or production sharing contract;

(d) each area of interest (geological feature, such as a mine or field, that lends itself to a unified exploration and development effort);

(e) geological units other than areas of interest (such as a basin or a geologic province[3]); or

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2 The Issues Paper defines a cost centre as "the geological, political, legal or operating unit chosen to accumulate costs, with the principal purpose of matching them with revenues derived from the production and sale of related mineral reserves".

3 The Issues Paper's glossary of terms defines a 'geologic province' as "a large area, such as a major portion of a continent, with common geologic features (broader than an area of interest)".

(f) the enterprise's organisational units.

25. Of these possibilities, defining the unit of account by reference to the legal rights held (e.g. an exploration permit, mining lease etc) has the advantages of:

    (a) *not* exceeding (or at the very least, being highly unlikely to exceed) the level of a cash-generating unit (as defined in IAS 36 *Impairment of Assets*); and

    (b) being defined objectively (i.e. by reference to the legal rights). This should therefore allow for the clear identification of the unit of account, but it may not enhance consistency or comparability if the multiple units of account (as defined by reference to the legal rights) are managed as a single operation.

26. Defining the unit of account by reference to an area of interest or an organisational unit may be a more principled solution, as the unit of account could be defined to comprise related properties if this is how the entity is managing its exploration and development efforts. In this case, the scope of the area of interest or organisational unit would have to be constrained so as not to exceed the level of a cash-generating unit. Although management would influence this definition of the unit of account, consistency and comparability can still be achieved as the ceiling for the unit of account is the cash-generating unit.

27. A different approach to defining the unit of account might be to look to the principles of depreciation. That is, the unit of account must be at a low enough level that the cost of the asset can be allocated over its useful life. The component accounting argument in IAS 16.44 supports this – if components of an asset have different useful lives, then they should be accounted for, and depreciated, separately. The research project team considers that this should lead to the unit of account being driven by the level at which reserves and resources are estimated – which is usually the mine or field. For this unit of account, the mine or field would be expected to be the ceiling and there may be circumstances where the unit of account could be below a mine or field, for instance, where reserves and resources are estimated for different parts of the same mine / mineral property. The research project team notes that further research would be required to consider the implications and feasibility of these possible unit of account options.

28. The other unit of account possibilities identified in paragraph 24 are not considered suitable according to the criteria proposed above. Although units of account defined by geography (e.g. the world, countries etc) or geology (e.g. the Gulf of Mexico basin) are capable of being clearly defined, their size would be greater than:

    (a) a cash-generating unit where more than one independent mine or field belongs to that unit of account; and/or

    (b) the level at which the assets belonging to those units of account would otherwise be depreciated in accordance with IAS 16.

Costs that should be capitalised

29. The *Framework* indicates that an asset should be recognised when the definition of an asset has been met and the recognition criteria have been satisfied. The existing *Framework* sets the asset recognition threshold at the time when it is probable that future economic benefits will flow to the entity. Applying the *Framework* recognition criteria to pre-production costs would require company management to exercise their professional judgement on:

    (a) the meaning of 'probable', which is not defined in the Framework or IFRSs except for the purposes of IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* where it is defined as "more likely than not" (refer paragraph 23); and

    (b) identifying *when* it is probable that the costs incurred will produce future economic benefits. IAS 38, at paragraphs 22-23, provides the following guidance on the recognition of intangible assets (other than intangible assets arising from research and development activities) that may be instructive for assessing the probability of future economic benefits more generally.

        22. An entity shall assess the probability of expected future economic benefits using reasonable and supportable assumptions that represent management's best estimate of the set of economic conditions that will exist over the useful life of the asset.

        23. An entity uses judgement to assess the degree of certainty attached to the flow of future economic benefits that are attributable to the use of the asset on the basis of the evidence available at the time of initial recognition, giving greater weight to external evidence.

30. Different management may have differing views as to when the probable recognition threshold is satisfied, and this may adversely affect consistency and comparability in the financial reporting of pre-production costs.

31. Broadly speaking, costs associated with undertaking exploration and evaluation activities relate to finding minerals or oil & gas and, then, assessing whether the discovered minerals or oil & gas are likely to be economically recoverable. Until there has been an assessment to indicate that the discovery is economically recoverable and/or that the company has decided to develop the discovery (noting that a development decision, assuming rational decision making, would suggest that the company believes the discovery to be economically recoverable), there may be some doubt as to whether, and to what extent, those costs are likely to produce future economic benefits. For instance, doubt might exist because it may be too early to determine whether a project would be economically viable or there may be legal or environmental problems that are currently preventing the development of the property. In contrast, costs incurred in developing a mine site or an oil & gas field are likely to generate future economic benefits as the development and construction of the mine or field and associated infrastructure is necessary to produce the minerals or oil & gas deposit. The research project team notes that there may be circumstances where arguably some pre-development costs might be expected to generate future economic benefits, for example the costs attributable to successful drilling program whereby the expectation is that the exploration property will (eventually) be developed by the company or will be sold to another entity that intends to develop the property.

32. The decision to capitalise or expense pre-production costs could instead be connected to the achievement / completion of a specific activity in the project lifecycle (e.g. the time of declaration of a reserve or project approval to develop a mine or field). The research project team thinks that the threshold for initial recognition should be tied to the reserves and resources classification system, which suggests that the threshold should be the declaration of a reserve. This approach has the advantage of setting a clear and common basis for the capitalise / expense decision for pre-production costs. It also has the advantage of the capitalise / expense decision being based on an observable event and the disclosure of reserve and resource volumes can provide some visibility of the asset being recognised.

33. This approach is broadly consistent with the approach adopted by IAS 38 in accounting for development costs, which also sets a bright line to determine when the asset can be recognised. The disadvantage of this approach is that, depending on the specified project maturity hurdle, it could delay the initial recognition of the asset (comprising the pre-production costs) as compared to when the *Framework* would otherwise recognise the asset. This may have the (undesirable) consequence of accounting effects driving business decisions. For instance, companies might accelerate the timing of a project approval decision so that they can capitalise more of their drilling costs as development costs rather than as evaluation costs.

Which pre-production costs incurred post initial recognition should be capitalised

34. After initial recognition of the reserve and resource asset, there is a question as to whether all pre-production costs incurred after that time should be capitalised or whether only those pre-production costs that incrementally add to the future economic benefits that are expected to be generated from the mineral or oil & gas property.

35. If only those pre-production costs that incrementally add future economic benefits to the asset are capitalised, then it is possible that some development costs might be expensed. A possible example might be the costs attributable to drilling a well during development that is found to be dry.

36. In contrast, permitting those unsuccessful pre-production costs to be capitalised possibly may enhance the decision-usefulness of the historical cost measurement of the asset. Users have indicated that historical cost information is used to calculate the returns management is generating on the capital it has invested. Capitalising all pre-production costs incurred after initial recognition of the asset, would allow users to assess how well the company is managing the development of the asset.

37. Capitalising both successful and unsuccessful pre-production costs post initial recognition would also limit the need for cost allocation between successful achievements (for which the costs would be capitalised) and unsuccessful achievements (for which the costs would be expensed). This would simplify the preparation of the historical cost measurement. The research project team notes that this approach is also consistent with existing practice in some jurisdictions. For instance, FAS 19 *Financial*

Accounting and Reporting by Oil and Gas Producing Companies, at paragraph 22, requires all development costs to be capitalised as part of the reserves in the cost centre.

38. The research project team considers that, as a starting position, the accounting principles present in IFRSs should be persuasive in identifying the treatment of pre-production costs incurred post-initial recognition. This might suggest that not all costs would be capitalised. Instead for costs to be capitalised, it would have to be probable that those costs can generate future economic benefits.

Costs that should be expensed (or written off)

39. The research project team proposes, as a building block of a historical cost accounting model,[4] that any costs incurred prior to the initial recognition of the reserve and resource assets should be expensed unless an asset would otherwise be recognised in accordance with IAS 16 *Property, Plant and Equipment*, IAS 38 *Intangible Assets*, other International Financial Reporting Standards, or the *Framework*.

40. This is considered to represent a simple and consistent accounting solution. Consistency is provided by setting initial recognition of the minerals or oil & gas asset to an observable event, which as discussed above might be the declaration of a reserve. The accounting approach should be (relatively) simple to implement as pre-development costs would be expensed as incurred unless those costs would be recognised in accordance with other IFRSs or the *Framework*. For example, costs incurred to acquire mineral rights would be recognised as an asset in accordance with IAS 38. Similarly, equipment acquired for use during exploration and evaluation activities would be recognised in accordance with IAS 16.

41. The research project team understands that expensing all pre-asset recognition costs means that the asset measurement post initial recognition has limited usefulness for calculating return on capital employed type measures. This information on historical exploration and evaluation spend for a project might instead be able to be provided via disclosure. .

42. Expensing these costs would also represent a significant change in current accounting practices, including entities accounting in accordance with IFRS 6 *Exploration for and*

[4] This is also consistent with the current value accounting model outlined in Agenda Paper 15B.

Evaluation of Mineral Resources. In particular, junior exploration companies generally have few, if any, other assets and therefore if the exploration and evaluation costs they incur in relation to ongoing activities are not capitalised, their only assets might be cash. Some may be concerned with the perception such an outcome would create.

Subsequent measurement

43. Subsequent measurement of the asset (i.e. the capitalised costs) relates to impairment and depreciation.

Impairment

44. Consistent with IAS 36, the subsequent measurement of the asset (i.e. the capitalised costs) should not exceed the recoverable amount of the unit of account. Expensing all pre-production costs incurred prior to initial recognition of the asset means that the same impairment problem that IFRS 6 had to address should not be encountered here. Following initial recognition of the asset, a recoverable amount for that asset should be able to be determined in accordance with IAS 36, that is, as the higher of the asset's (or cash-generating unit's) fair value less costs to sell and its value in use.

Depreciation

45. Depreciation of the asset should commence once production has commenced. This is consistent with the existing requirements in IAS 16. The research project team expects that the units-of-production method would normally be the most appropriate basis for depreciating the unit of account and any assets that have useful lives that are related to reserves and resources. A major depreciation issue to be considered further is the basis over which those assets should be depreciated (e.g. proved reserves only, just reserves, or reserves and resources). This would be an issue for further research.

QUESTIONS

Q1) Does the Board agree that a disclosure-focused approach should be included as an alternative in the research project's discussion paper?

Q2) Does the Board agree that, if the disclosure-focused approach is accompanied by a historical cost-based accounting model, the proposed building blocks are appropriate for commencing consultation with users, preparers and auditors on to the basic design of a historical cost accounting model?