

8th October 2001

Sir David Tweedie, Chairman
International Accounting Standards Board
30 Cannon Street
London EC4M 6XH
UNITED KINGDOM

Dear Sir David,

Issues Paper: Extractive Industries

Deloitte Touche Tohmatsu is pleased to comment on the Issues Paper, *Extractive Industries* issued for comment by the IASC Steering Committee on Extractive Industries (the “Issues Paper”).

There is currently no internationally recognised accounting standard dealing with the extractive industries, and we strongly support the development of an international accounting standard. There are currently a wide range of accounting and reporting practices adopted by enterprises in the extractive industries. We encourage the Board to develop a solution to the various accounting and reporting issues that is acceptable globally and leads to comparable and transparent reporting by extractive industries enterprises.

We believe that, at the current time, an historical cost concept is more appropriate for accounting for the extractive industries. Whilst conceptually a model of accounting based on the fair values of mineral properties and reserves would be superior to the historical cost concept for the extractive industries, we believe that the vast array and volatility of variables involved, combined with difficulties in measurement and recognition in a valued-based model, would result in information that is less reliable and comparable than a historical cost basis of accounting.

The initial focus of any extractive industries standard should therefore be on achieving consistency and comparability within the historical cost concept of accounting, with a later move to a value based model if this is considered warranted.

We also believe that, wherever possible, extractive industries enterprises should apply all relevant international accounting standards when preparing their financial reports. An extractive industries standard should focus on unique aspects of accounting for these types of enterprises and provide guidance to achieve consistency in application of other standards.

There are few areas where we believe that current accounting standards are not appropriate for the extractive industries, although we strongly support the development of guidance on the application of some of these standards to the extractive industries. For instance, the application of an impairment test as prescribed by IAS 36 should be required in the extractive industries, but extensive guidance is required to ensure that an appropriate portion (if any) of proven, probable, and possible reserves are included when measuring any impairment, along with consistently applied assumptions about revenues, costs, other outflows, and economic and technological conditions.

Within the context of an historical cost model, there is an urgent need to achieve consistency in recognition, measurement, and subsequent depreciation of extractive industry related assets, particularly pre-production expenditure. We favour the following treatment of pre-production costs:

- Preacquisition prospecting and exploration: Charge to expense
- Property acquisition (direct and incidental): Capitalise
- Post-acquisition exploration: Capitalise
- Evaluation or appraisal costs: Capitalise
- Development cost: Capitalise
- Construction cost: Capitalise
- All capitalised costs are subject to impairment test based on disposal value of the acquired rights

We believe this approach is more consistent with the Framework than capitalisation or deferral of costs pending determination of whether economically recoverable reserves exist. Any asset recognised is not a deferral of “exploration costs” per se, but an intangible asset that effectively represents knowledge gained about a property (mineral rights) that is saleable and which generally has a readily determined fair value.

Once costs have been capitalised, the method and form of depreciation currently adopted by participants in the extractive industries varies widely. We believe that the requirements of IAS 16 should be applied, in that the depreciable amount of an item of property, plant and equipment should be allocated on a systematic basis over its useful life based on a method that reflects the pattern in which the asset's economic benefits are consumed by the enterprise. Any extractive industries standard should not change these requirements, but provide guidance on the application of the concepts of IAS 16. In the majority of cases, this may imply that a units-of-production basis is appropriate, but this method should not be mandated as it may not represent the pattern of consumption of the economic benefits of all assets.

In general, we believe that the unit of production method reflects the pattern of benefit consumption for all assets associated with reserves, including capitalised pre-production costs.

The more contentious aspect of depreciation in the extractive industries is what measure of reserves to utilise in any units-of-production or life-of-mine depreciation calculation, and the extent (if any) to which future costs should be included in the depreciable amount. Our preference would be to base depreciation on an appropriate portion of both proven and probable reserves. More importantly, and no matter what portion of reserves is used for depreciation, consistency must be maintained between the capitalised costs being depreciated and the units used to depreciate those capitalised costs.

Given the unique way in which the life cycle of a mining or petroleum operation includes an overlapping of the exploration, development, construction, production and closure phases, development and construction costs are often incurred after production has commenced. Probable and possible reserves are being explored and added to the resource 'inventory', development of future mining or well areas continues and construction or upgrading of processing facilities regularly occur after production has commenced. The plan for the operation will include these aspects and they form an overall part of the management of the operation. It therefore appears reasonable to depreciate the total expected capital costs for the eventual exploitation of the proven and probable reserves over the equivalent proven and probable reserves quantity.

There are also issues with revenue recognition in the extractive industries that may warrant the modification of IAS 18 in one particular aspect. During the initial construction and commissioning of an operation, it is common to have some production occur that can be sold. The proceeds from the sale of this production are commonly treated as a reduction in capitalised costs, rather than revenue. We believe that this may be an appropriate treatment for such costs, given the difficulties of allocating expenses associated with the production of the revenue, its immaterial amount, and its nature as a type of 'cost recovery'. We recognise that SIC D26 would treat incidental revenue as revenue and not as a reduction of costs. However, the presumption underlying D26 is that incidental revenue does not diminish the capability of the asset to produce revenue once it is fully operational. In the extractive industries, there is a finite amount of reserves underground. Each unit produced does diminish future capability. Other than for this one exception, we believe that the requirements of IAS 18 are appropriate to apply to the extractive industries.

We congratulate the board on the preparation of the Issues Paper and believe that it is an important first step in improving the consistency and comparability of accounting and reporting in the extractive industries. We support the development of an accounting standard on extractive industries and believe the board will develop a framework for accounting for the extractive industries that will be accepted by the major standard setters throughout the world and lead to improved reporting to the users of financial reports of enterprises in the mining and petroleum industries.

The appendix to this letter contains our responses to the specific issues raised in the Issues Paper, including a detailed discussion of the matters referred to above.

If you have any questions concerning our comments, please contact Stig Enevoldsen in Copenhagen, Denmark at +45 33 76 33 33.

Yours faithfully
DELOITTE TOUCHE TOHMATSU

Stig Enevoldsen
Partner

Encl.

APPENDIX

Our response is shown in bold and underlined. Additional comments are in italics. In some cases, we do not favour any of the choices presented for reasons discussed in our comments.

Basic Issue 1.1 – Possible additional industries besides mining and petroleum

Are there any industries besides mining and petroleum that should be included in the scope of this project?

- a. **No.**
- b. Yes (please describe).

There are no other industries that should be included in the scope of this project.

Basic Issue 1.2 – Definition of upstream activities

The IASC Board has defined the scope of this project to include the upstream activities of enterprises in the extractive industries, but not the downstream activities. Other International Accounting Standards would apply to downstream activities. Is the definition of upstream activities in paragraphs 1.16-1.19 appropriate and, if not, how would you change it?

- a. **Yes, the definition is appropriate.**
- b. I would modify the definition as follows (please describe).

The definition is appropriate.

Basic Issue 1.3 – A single standard for both mining and petroleum

Should a single standard be developed for all extractive industries (that is, applicable to both mining and petroleum enterprises), or should separate standards be developed?

- a. A single International Accounting Standard applying to both industries.
- b. Separate International Accounting Standards for the mining industry and the petroleum industry.
- c. **A single International Accounting Standard with separate requirements or guidance for mining or petroleum as necessary to address industry-specific issues.**

A single International Accounting Standard is appropriate, but may need specific provisions or guidance for mining and petroleum as appropriate.

Basic Issue 2.1 – Phases of upstream activities

Are the operating phases in the upstream sector of the extractive industries appropriately described in Chapter 2?

- a. **Yes.**
- b. No (please explain).

Basic Issue 3.1 – A common set of reserve definitions for financial reporting by mining and petroleum enterprises

Should an International Accounting Standard on the extractive industries contain a common set of reserve definitions to be used by both mining and petroleum enterprises?

- a. Yes, it is essential that both industries use a common set of definitions.
- b. **A common set of definitions is desirable but, for pragmatic reasons, the Standard should initially use the existing JORC definitions for mining enterprises and the existing WPC-SPE definitions for petroleum enterprises. However, a common set of definitions should be developed for the longer term.**
- c. Common definitions are not necessary. The Standard should use the existing JORC definitions for mining and the existing WPC-SPE definitions for petroleum.
- d. Other (please explain).

We strongly believe that reserve definitions are essential if the Standard is to be applied consistently. Reserve definitions affect amortisation rates, impairment calculations and restoration provisions. The existing WPC-SPE and JORC definitions should be used as an interim measure in any International Accounting Standard on Extractive Industries, with a view to developing a common definition, at which point the standard could be amended.

Sub-issue 3.1.1 – Developing the common definitions

If a common set of definitions is to be developed, either for the initial IASC Standard on the extractive industries or for the longer term, who should develop those definitions?

- a. IASC.
- b. **A joint industry group.**

We believe that for any definitions to be widely accepted and applied by industry, that they will need to be developed and approved by industry. The IASB should establish the broad requirements of the definitions in conjunction with industry. The definition should be detailed and specific, and easily applied across a wide range of different commodities and resource types.

Sub-issue 3.1.2 – Probabilistic vs. deterministic approach to reserve definitions

The WPC-SPE petroleum reserve definitions allow an enterprise to choose whether to use a deterministic or a probabilistic approach to measuring reserve quantities. The JORC definitions are deterministic. If you believe that these definitions offer an appropriate starting point for use in an International Accounting Standard, should the standard require either the deterministic or the probabilistic approach for both petroleum and mining enterprises?

- a. Deterministic for both petroleum and mining enterprises.
- b. **Probabilistic for both petroleum and mining enterprises.**
- c. Allow the choice for both petroleum and mining enterprises.

We believe that any definitions ultimately developed should adopt a probabilistic approach to avoid differences in interpretation of any deterministic definitions. Clear direction and guidance will need to be given in order to ensure consistency of application.

Sub-issue 3.1.3 – Feasibility of probabilistic definitions for mining reserves

The WPC-SPE petroleum reserve definitions allow an enterprise to choose whether to use a deterministic or a probabilistic approach to measuring reserve quantities. The JORC definitions are deterministic. Is it feasible to develop probabilistic definitions for mining reserves?

- a. **Yes.**
- b. No.

It is entirely feasible and appropriate for any definitions of mining reserves to be probabilistic to avoid differences in interpretation of the definition.

Sub-issue 3.1.4 – Quantification of statistical probabilities

If a probabilistic approach is used, the WPC-SPE definitions rely on a 90 per cent statistical probability for proved reserves, a 50-90 per cent or greater statistical probability for probable reserves, and a 10-50 per cent probability for possible reserves. If a probabilistic approach were either a requirement or an option, for petroleum or mining enterprises or both, are the WPC-SPE quantifications of probability appropriate for financial reporting?

- a. **Yes, the quantifications are appropriate.**
- b. Yes, in general quantifications are appropriate, but some modifications to those in the WPC-SPE definitions are needed (please elaborate).
- c. No, the terms proved, probable, and possible should not be quantified. Instead, the degree of probability for each category should be expressed in narrative terms such as “with reasonable certainty”) and left to the judgement of the expert making the estimate.

Whilst these quantifications appear reasonable, we believe it is essential that petroleum and mining industry specialists and experts be involved in the final determination of any quantification of probability in the definition of reserves.

Basic Issue 3.2 – Operating conditions and environment

In making estimates of reserve quantities, what assumptions about operating conditions, such as expected technological developments, legal and regulatory environment, operating equipment, etc., should be made?

- a. **Assumptions that reflect operating conditions that exist as of the date of the estimate.**
- b. Assumptions that reflect all available evidence as to the operating conditions that will exist at the time the minerals will be produced (excluding development of a completely new technology unless it is supported by sufficient objective evidence).

We believe that the assumptions should be based on operating conditions that exist at the date of estimate, but allow for known changes in operating conditions that will exist at the time that the minerals will be produced. Therefore, known changes in government royalty rates and the expected impact of known production cost savings should be incorporated into the assumptions used, but management’s best estimate of likely changes in productivity, technology, and other factors should not be taken into account.

Basic Issue 3.3 – Levels of prices and costs

In general, which price level would you use for measuring reserve quantities – assume that a consistent cost level will be used as well?

- a. Current spot price.
- b. **Current spot price adjusted for contractual changes.**
- c. Current forward price.
- d. Management’s best estimate of the price expected to exist at the anticipated time of production.

The use of current spot price should be mandated as the base for measuring reserve quantities. Any requirement to use spot price will need to define how the spot price is determined – the spot price at balance date, the average of the daily spot price over a particular period, etc.

Current spot price should be adjusted for contractual changes because, with many minerals - gold and coking coal are good examples – as much production is sold in terms of long term contracts as is sold on the spot market. Reserve determination must reflect contracted production, which could account for a large part of an enterprise’s known reserves.

Many entities in the extractive industries use derivative products as a hedge against adverse price movements or to ensure price certainty for their products. Some entities operating in the extractive industries may use these forward prices when determining reserves. If the Joint Working Group proposals on Accounting for Financial Instruments and Similar Items results in the implementation of an accounting standard that requires the recognition of these derivatives in the statement of financial position, with movements in the value in the statement of financial performance, it would not be appropriate to allow the inclusion of these items when developing reserves. The important thing to avoid is potential “double counting” whereby the value of the hedge is recognised as a financial asset, while its terms are factored into the estimate of future revenues in an impairment calculation for a long-term asset. This problem would only arise

when an asset is impaired. If an asset is carried at amortised cost, the double counting issue does not arise.

Entities operating in the extractive industries also commonly determine reserves on an on-going basis or may not determine or update reserve estimates at or close to balance date. Any accounting standard on the Extractive Industries will need to address how movements in the dictated price from when the reserves are determined to the balance sheet date are taken into account (if at all) when calculating reserves at balance date.

Basic Issue 3.4 – Income taxes

If discounting of cash flows is necessary for purposes of estimating reserve quantities, should income taxes be considered as a cash outflow?

- a. Yes.
- b. **No.**

Basic Issue 3.5 – Discount rate

If discounting of cash flows is necessary for purposes of estimating reserve values, which discount rate would you use?

- a. The rate on risk-free investments.
- b. **Risk-adjusted rate.**
- c. Weighted average long-term borrowing rate of the enterprise.
- d. The enterprise's incremental long-term borrowing rate.
- e. The enterprise's weighted average cost of capital.
- f. The enterprise's "hurdle rate" for similar assets.
- g. A standard rate prescribed for all enterprises in the extractive industries.
- h. Other (please describe).

We prefer the use of a risk-adjusted rate when performing a discounted cash flow analysis. Any rate ultimately dictated should be consistent with the conclusions drawn from the IASB's project on present value.

Basic Issue 4.1 – Historical cost concepts for petroleum enterprises

For petroleum enterprises, if one of the historical cost concepts were required for the primary financial statements, which of the following concepts, broadly defined, should be adopted? Each of these concepts is interpreted in a variety of ways in practice today. A discussion of the specific costs that might be capitalised under each concept is set out in Chapter 6.

- a. **A method more consistent with the successful efforts concept than with the other concepts.**
- b. A method more consistent with the area-of-interest concept than with the other concepts.
- c. A method more consistent with the full cost concept than with the other concepts.
- d. A method more consistent with the appropriation concept than with the other concepts.

For both petroleum and mining enterprises, we support the capitalisation of costs that meet the definition of an "asset" under the Framework. Of course, the capitalisation of pre-production costs can be problematic as it is often too early in the operating phases to determine success or otherwise of the project.

As a result, we believe that an approach more consistent with the successful efforts concept is appropriate. In no circumstances would it be appropriate to reinstate expenditure incurred and expensed in the past.

Sub-issue 4.1.1 – Allow more than one concept for petroleum enterprises

For petroleum enterprises, should an accounting standard allow an enterprise to choose among more than one historical cost concept in the primary financial statements and, if so, which concept should be permitted?

- a. **No. The standard should require a single concept for all enterprises.**
- b. Yes. The standard should allow all enterprises to choose among the following concepts (please describe).

To ensure consistency and comparability between enterprises that operate in the extractive industries, it is important that choice be limited and a single historical cost approach be adopted.

Basic Issue 4.2 – Historical cost concepts for mining enterprises

For mining enterprises, if one of the historical cost concepts were required for the primary financial statements, which of the following concepts, broadly defined, should be adopted? Each of these concepts is interpreted in a variety of ways in practice today. A discussion of the specific costs that might be capitalised under each concept is set out in Chapter 6.

- a. **A method more consistent with the successful efforts concept than with the other concepts.**
- b. A method more consistent with the area-of-interest concept than with the other concepts.
- c. A method more consistent with the full cost concept than with the other concepts.
- d. A method more consistent with the appropriation concept than with the other concepts.

Refer to our comments above under basic issue 4.1.

Sub-issue 4.2.1 – Allow more than one concept for mining enterprises

For mining enterprises, should an accounting standard allow an enterprise to choose among more than one historical cost concept in the primary financial statements and, if so, which concepts should be permitted?

- a. **No. The standard should require a single concept for all enterprises.**
- b. Yes. The standard should allow all enterprises to choose among the following concepts (please describe).

Refer to our comments above under sub issue 4.1.1.

Basic Issue 5.1 – Basis of primary financial statements: petroleum enterprises

For petroleum enterprises, should the primary financial statements be based on a historical cost concept or a value-based concept of accounting for preproduction activities and reserves? In answering, assume that whichever concept is used in the primary financial statements, disclosures on the other basis could be required.

- a. **A historical cost concept.**
- b. A value-based concept.

We believe that at the current time, an historical cost concept is more appropriate when accounting for both petroleum and mining enterprises.

The main driver of equity-holder value in the extractive industries is not determined by reference to historical costs but rather by reference to reserve values and other factors. However, the determination of relevant and reliable information for a value-based method of accounting can be problematic, particularly given the current divergent practices commonly adopted by enterprises in the extractive industries.

However, we support the implementation of a value based concept of accounting for preproduction activities and reserves in the longer term, particularly as more industries adopt this basis of measurement. Any initial standard on accounting for the extractive industries should focus on achieving consistency and comparability using the historical cost concept of accounting. The concepts adopted should contemplate any transition to a value based concept at a later stage.

Many entities in the extractive industries use derivative products as a hedge against adverse price movements or to ensure price certainty for their products. The proposals included in the Joint

Working Group of Standard Setters Invitation to Comment on “Accounting for Financial Instruments and Similar Items” may be implemented in such a way that means that these hedging mechanisms are effectively recognised on a value-basis, with changes in value being reflected in the profit and loss account. In this case, we believe that it would be appropriate for a value-based concept of accounting for the extractive industries to be implemented to ensure that there is symmetry between accounting for the assets of an extractive industries enterprise and the hedging products used to manage the prices achieved for production.

Basic Issue 5.2 – Basis of primary financial statements: mining enterprises

For mining enterprises, should the primary financial statements be based on a historical cost concept or a value-based concept of accounting for preproduction activities and reserves? In answering, assume that whichever concept is used in the primary financial statements, disclosures on the other basis could be required.

- a. A historical cost concept.
- b. A value-based concept.

Refer to our comments at basic issue 5.1

Basic Issue 5.3 – Which value based concept

If a value-based concept of accounting for preproduction activities and reserves is required for the primary financial statements, which of the following concepts, broadly defined, should be adopted?

- a. Discovery value concept.
- b. **Current value concept.**
- c. Other (please explain).

The current value concept will provide more relevant and reliable information about the financial performance and position of an extractive industries enterprise.

Basic Issue 5.4: Which reserves

If either discovery value accounting or current value accounting is used in the primary financial statements, for which reserves should value be computed?

- a. Proved developed.
- b. Only that portion of proved developed reserves that is currently in production.
- c. All proved (developed and undeveloped).
- d. All proved plus probable.
- e. **All proved plus probable and possible.**

We believe that all proved, probable and possible reserves should be included when determining the current value. However, these reserves should only be included at their respective probabilistic percentages derived from the definitions of the components of reserves.

Basic Issue 5.5 – Which concept of value

If the primary financial statements were based on the values of reserves, on what concept of value should the values of mineral reserves be based?

- a. **Fair value.**
- b. Net selling price.
- c. Expected exit value in the due course of business.
- d. Value in use.
- e. A standardised measure” applying a single set of assumptions, including a standardised discount rate, to all enterprises.
- f. Current replacement cost.
- g. Other (please explain).

We believe that fair value provides the most relevant and reliable information to the users of the financial statements where they are based on the value of reserves.

Basic Issue 5.6 – Presenting discovery values

If discovery value accounting is used in the primary statements, how should the initial discovery values be presented?

- a. Recognise the value of reserves discovered in the current period in net profit or loss for the period and charge the related cumulative capitalised costs to expense.
- b. Report the net discovery value in the current period as a separate component of shareholders' equity on the balance sheet. As the related minerals are produced and sold or transferred, the net discovery value recorded for the reserves produced would be transferred to retained earnings.
- c. Report the net discovery value in the current period as a separate component of shareholders' equity on the balance sheet. As the related minerals are produced and sold or transferred, the net discovery value recorded for the reserves produced would be recognised in net profit or loss for the period.

We do not support the use of discovery value accounting in the primary statements.

Basic Issue 5.7 – Presenting current values

If current value accounting is used in the primary statements, how should value changes (including both new discoveries and changes in values of past discoveries) be presented in the financial statements?

- a. Recognise the net change in reserve values in net profit or loss for the period.
- b. Other (please explain).

If current value accounting is used in the primary statements, we believe that value changes should be reported as a component of overall financial performance of the entity. We note that the IASB has begun a project on reporting financial performance and the reporting of changes in fair value will be considered as part of this project. Changes in current value would form part of investing or other-than-business activities. Changes in the current value of associated hedging would be reported as a component of treasury or financing activities.

Basic Issue 6.1 – Preacquisition prospecting and exploration costs

How should preacquisition prospecting and exploration costs be accounted for?

- a. **Expense all in the period in which they are incurred, no reinstatement.**
- b. Expense all but reinstate those costs that relate to commercially recoverable reserves that are subsequently discovered.
- c. Capitalise all as an asset.
- d. Defer all as an asset pending determination of whether commercially recoverable reserves are discovered.
- e. Charge the cost directly to equity with reinstatement if it is determined that commercially recoverable reserves have been discovered.
- f. Other (please explain).

We believe that the following principles should apply to accounting for pre-production costs:

- *Preacquisition prospecting and exploration: Charge to expense*
- *Property acquisition (direct and incidental): Capitalise*
- *Post-acquisition exploration: Capitalise*
- *Evaluation or appraisal costs: Capitalise*
- *Development cost: Capitalise*
- *Construction cost: Capitalise*
- *All capitalised costs are subject to impairment test based on disposal value of the acquired rights*

In many cases, tenements, exploration rights and exploration information can be exchanged between parties in an arm's-length transaction, even where rights do not exist or where mineralisation has not yet been located. This supports the recognition of an asset as it can sold. We believe that this asset is intangible in nature, in that it represents the intellectual and other knowledge obtained about a particular area or region. The discovery of potential prospects, mineralisation or uneconomic reserves will increase the value of the intangible, often presented as "exploration" or "prospecting" expenditure by entities that currently capitalise these types of expenditure.

In many major mining and petroleum regions of the world, exploration rights and information are regularly bought and sold and a ready market therefore exists to determine fair value. This fair value should be the maximum amount of expenditure that can be capitalised and carried forward. Where there is no active market to determine fair value, the expenditure should be expensed until such time as a market exists or economically recoverable reserves are located and a fair value can be determined.

Sub-issue 6.1.1 – Nature of the asset

If any preacquisition prospecting and exploration costs are capitalised or deferred as an asset, please describe your view as to the nature of the asset?

We would not capitalise or defer any preacquisition prospecting and exploration costs.

Basic Issue 6.2 – Mineral property direct acquisition costs

How should mineral property direct acquisition costs (the direct costs of acquiring legal rights to undeveloped mineral properties) be accounted for? [Please ignore, for now, the question of an impairment test for capitalised costs]

- a. Expense all in the period in which they are incurred, no reinstatement.
- b. Expense all but reinstate those costs that relate to commercially recoverable reserves that are subsequently discovered.
- c. **Capitalise all as assets.**
- d. Defer all as an asset pending determination of whether commercially recoverable reserves are discovered.
- e. Charge the cost directly to equity with reinstatement.
- f. Other (please explain).

Capitalise all as assets subject to an impairment test. Please refer to our comments at basic issue 6.1.

Sub-issue 6.2.1 – Nature of the asset

If any mineral property direct acquisition costs are capitalised or deferred as an asset, please describe your view as to the nature of the asset?

The asset is a tangible non-current asset, mineral rights.

Basic Issue 6.3 – Incidental property acquisition costs

How should the incidental costs of acquiring undeveloped mineral properties (both payments to outsiders and internal costs attributable to acquiring the properties) be accounted for when incurred?

- a. Expense all when incurred.
- b. **Treat all in the same way as direct property acquisition costs.**
- c. Treat payments to outsiders in the same way as direct property acquisition cost, but charge to expense all (or perhaps some) internal costs relating to the enterprise's own personnel and services.

Treat the same way as direct property acquisition costs, that is, capitalise all as assets subject to an impairment test. Please refer to our comments at basic issue 6.1.

Basic Issue 6.4 – Post-acquisition G&G exploration costs

How should post-acquisition G&G exploration costs be accounted for? [Please ignore, for now, the question of an impairment test for capitalised costs]

- a. Expense all in the period in which they are incurred, no reinstatement.
- b. Expense all but reinstate those costs that relate to commercially recoverable reserves that are subsequently discovered.
- c. **Capitalise all as assets.**
- d. Defer all as an asset pending determination of whether commercially recoverable reserves are discovered. If reserves are not found, charge the costs to expense. If reserves are found, capitalise related costs.
- e. Charge the cost directly to equity with reinstatement.
- f. Other (please explain).

Capitalise all as assets subject to an impairment test. Please refer to our comments at basic issue 6.1.

Sub-issue 6.4.1 – Nature of the asset

If any post-acquisition G&G exploration costs are capitalised or deferred as an asset, please describe your view as to the nature of the asset?

The asset to which these costs relate is a tangible non-current asset, mineral rights.

Basic Issue 6.5 – Post-acquisition drilling, trenching, and sampling exploration costs

How should post-acquisition drilling, trenching, and sampling exploration costs be accounted for? [Please ignore, for now, the question of an impairment test for capitalised costs]

- a. Expense all in the period in which they are incurred, no reinstatement.
- b. Expense all but reinstate those costs that relate to commercially recoverable reserves that are subsequently discovered.
- c. **Capitalise all as an asset.**
- d. Defer all as an asset pending determination of whether commercially recoverable reserves are discovered.
- e. Charge the cost directly to equity with reinstatement.
- f. Other (please explain).

Capitalise all as assets subject to an impairment test. Please refer to our comments at basic issue 6.1.

Sub-issue 6.5.1 – Nature of the asset

If any post-acquisition drilling, trenching, and sampling exploration costs are capitalised or deferred as an asset, please describe your view as to the nature of the asset?

The asset to which these costs relate is a tangible non-current asset, mineral rights.

Basic Issue 6.6 – Post-acquisition evaluation or appraisal costs

How should post-acquisition evaluation or appraisal costs be accounted for? These are costs incurred to determine whether reserves are commercially recoverable. [Please ignore, for now, the question of an impairment test for any such capitalised costs]

- a. Expense all in the period in which they are incurred, no reinstatement.
- b. Expense all but reinstate those costs that relate to commercially recoverable reserves that are subsequently discovered.
- c. **Capitalise all as an asset.**
- d. Defer all as an asset pending determination of whether commercially recoverable reserves are discovered.
- e. Charge the cost directly to equity with reinstatement.
- f. Other (please explain).

Capitalise all as assets subject to an impairment test. Please refer to our comments at basic issue 6.1.

Sub-issue 6.6.1 – Nature of the asset

If any post-acquisition evaluation or appraisal costs are capitalised or deferred as an asset, please describe your view as to the nature of the asset?

The asset to which these costs relate is a tangible non-current asset, mineral rights.

Basic Issue 6.7 – Time limit on deferrals

If certain preproduction costs are deferred pending determination of whether commercially recoverable reserves were found, do you favour a time limit for any of these deferred cost categories, and if so what would that limit be? If your answer would be different for different categories of costs, please explain.

- a. Different exact time limits, depending on the reason for the uncertainty.
- b. Time limit would be imposed only if no activity is currently under way relating to the prospect.
- c. No time limit.

We do not support the deferral of costs that do not meet the definition of an asset. Therefore, it is not appropriate to impose a time limit on the 'deferral' of any asset. The recognition criteria for assets in the Framework should be utilised without modification. At the same time, an impairment test should be imposed as it is for other assets.

Basic Issue 6.8 – Development costs

How should development costs be accounted for? [Please ignore, for now, the question of an impairment test for capitalised costs]

- a. **Capitalise all as an asset.**
- b. Capitalise all development costs as an asset except those development costs that do not result in an asset that can be used in the production process, which should be charged to expense (for instance, the cost of a development dry hole).
- c. Other (please explain).

At the time that development is occurring, it has been determined that economically recoverable reserves exist and the mine or well infrastructure is being put in place. It is clear that an asset exists (within the meaning of the Framework) and costs associated with bringing the asset into production should be capitalised.

Sub-issue 6.8.1 – Nature of the asset

If any development costs are capitalised or deferred as an asset, please describe your view as to the nature of the asset?

The asset to which these costs relate is a tangible non-current asset, mineral rights.

Basic Issue 6.9 – Construction costs

How should construction costs be accounted for? [Please ignore, for now, the question of an impairment test for capitalised costs]

- a. If such costs relate to a single cost centre, capitalise the costs as part of the capitalised costs of that cost centre (normally depreciated on a unit-of-production basis if the life of the assets is coincident with the life of the mineral reserves, or on a straight-line basis if the economic life is less than the life of the reserves). If such costs relate to more than one cost centre, account for such costs as other property, plant, and equipment under IAS 16, Property, Plant and Equipment and depreciate on a time basis.
- b. If such costs relate to a single cost centre, capitalise the costs as part of the capitalised costs of that cost centre (normally depreciated on a unit-of-production basis). If such costs relate to more than one mineral cost centre, allocate such costs to the various cost centre served and capitalise them as part of the capitalised costs of those cost centres, or depreciate the costs on a unit-of-production basis using the reserves expected to be recovered in all cost centres in which the asset will be used.
- c. Other (please explain).

Costs should be capitalised into single cost centres or as property, plant or equipment as appropriate. All such costs should be depreciated in a manner that reflects the consumption of the economic benefits embodied in the asset. Different methods or units may be appropriate for different assets and one method should not be prescribed by any extractive industries standard.

For instance:

- *underground mining equipment may be depreciated by on a units of production basis on a tonnes mined basis*
- *a furnace may be depreciated on a contained metal basis*
- *a well might be depreciated on a barrels lifted basis*
- *motor vehicles used by mine management staff may be depreciated on a straight-line basis*

Assets that are integral to a single mining or extraction process but that have an economic life shorter than the life of the reserves should also be depreciated using a method that reflects the consumption of economic benefits embodied in the asset. If the economic benefits are consumed by reference to the units processed, then this may be the most appropriate basis of depreciation, albeit using a lesser number of 'units' than the overall life of mine.

Difficulties can arise when capitalising costs associated with the construction of a mining operation. Construction often continues after production has commenced. Employees and equipment can be used interchangeably between production and construction activities and allocation of costs can be difficult. It is recommended that any extractive industries standard clearly define when construction costs must should be capitalised into the asset, when production has commenced and capitalisation should cease, and how any apportionment should be conducted.

Sub-issue 6.9.1 – Nature of the asset

If any construction costs are capitalised or deferred as an asset, please describe your view as to the nature of the asset?

Construction costs capitalised as an asset are in the nature of property, plant and equipment. We do not consider that construction costs in the extractive industries are conceptually any different to those in other industries. The construction of a mining or petroleum operation is no different to the construction of a factory, building or other facility. In some cases, the life of the constructed asset is limited by the life of the mine or well, but that affects amortisation rather than the nature of the asset.

Extractive industry assets may be subclassified as mining or petroleum properties, or a similar description, and may be disclosed separately on the face of the statement of financial position if considered relevant by the reporting enterprise.

Basic Issue 6.10 – Exploration and development costs after production

Sometimes, exploration and development costs are incurred after production has begun.

If that is the case, how would you treat the cost?

- a. Treat as any other exploration or development cost.
- b. Treat as a production cost.
- c. Other (please describe).

Treat as any other exploration and development cost.

Basic Issue 6.11 – Capitalisation of borrowing costs

Regardless of your view on capitalising costs of carrying undeveloped properties (Basic Issue 6.1), in general how should borrowing costs for expenditures in upstream activities be accounted for?

- a. Allow both the benchmark (expense) and allowed alternative (capitalise) treatments under IAS 23.
- b. Allow both IAS 23 treatments, but prohibit any capitalisation before property rights have been acquired, that is, borrowing costs during the period of prospecting activity should not be capitalised even though prospecting costs are deferred or capitalised.
- c. Prohibit capitalisation in all cases.

We believe that the requirements of IAS 23 should be applied to the extractive industries without amendment. If an amount meets the definition of an asset and that asset is a qualifying asset within the meaning of IAS 23, then both allowed treatments should be permitted.

Sub-issue 6.11.1 – Start of capitalisation

If borrowing costs relating to the capitalised costs of acquisition, exploration, and development of mineral properties are capitalised, when should capitalisation begin?

- a. When the property is acquired.
- b. When exploration begins.
- c. When development begins.
- d. Other (please explain).

Capitalisation of borrowing cost could begin when costs of exploration, development, and construction are capitalised and funded by borrowings – subject to an impairment test for the asset.

In any case, as noted at basic issue 6.11 above, the above analysis may not be appropriate in all cases and there may be situations where the definition of a “qualifying asset” is met in other phases of the extractive industries process. Any extractive industries standard should contain commentary clarifying, but not modifying, the requirements of IAS 23.

Basic Issue 6.12 – Overhead costs

Can overhead attributable to activities whose costs are capitalised also be capitalised?

- a. **Yes.**
- b. No.
- c. Other (please explain).

Basic Issue 6.13 – Carrying costs of undeveloped properties

How should the costs of carrying undeveloped mineral properties (other than financing costs and legal fees) be accounted for when incurred? [Please ignore, for now, the question of an impairment test for capitalised costs]

- a. **Expense all when incurred.**
- b. Treat all as part of property acquisition costs and account for them in the same manner.
- c. Treat unusual, nonrecurring carrying costs as part of property acquisition cost and account for them in the same manner, but charge to expense all routine carrying costs.
- d. Capitalise certain costs by their nature (indicate which you would capitalise):
 - Delay rentals paid on leased mineral properties until specified work (drilling exploratory wells on the property) is commenced.
 - Property taxes or rates taxes prior to production.
 - Accounting and record keeping costs.
 - Rates taxes or property taxes based on value.
 - Legal costs to defend title.
 - Other (please describe).

Expense all when incurred. These do not increase the potential of the property to generate cash flows.

Basic Issue 6.14 – Choice of cost centre

If the successful efforts or area of interest concept were adopted, for what cost centre would you accumulate costs? [Please ignore, for now, the question of an impairment test for capitalised costs]

- e. the world;
- f. each country or group of countries in which the enterprise operates;
- g. each contractual or legal mineral acquisition unit;
- h. each area of interest (for example, the field or the mine);
- i. geological units other than areas of interest; and
- j. the enterprise's organisational units.
- k. Other (please describe).

The choice of cost centre should be derived as the smallest group of assets that work together to generate a return and that can be sold, disposed or discontinued as a unit without rendering other units unusable or uneconomic. This will generally be equivalent to the "area of interest" being an individual field or mine.

Basic Issue 7.1 – Method of calculating depreciation

Which method is appropriate for calculating depreciation of various categories of capitalised costs included in a producing cost centre (see table below)? If your answer would be different for the mining industry and for the petroleum industry, please explain how and why it would be different.

- a. Unit of production depreciation should be used for all categories of costs.
- b. Straight-line (time-based) depreciation should be used for all categories of costs.
- c. Unit-of-production depreciation should generally be used except in certain circumstances (please describe).
- d. Other (please explain).

We believe that depreciation and amortisation should be calculated in a manner consistent with IAS 16 "Property, Plant and Equipment".

All mining and petroleum assets should be depreciated in a manner that reflects the consumption of the economic benefits embodied in the asset. Different methods or units may be appropriate for different assets and one method should not be prescribed by any extractive industries standard. Because consumption of benefits in the extractive industries often means diminished future production, we believe that, in general, unit-of-production depreciation should be used for assets that are related to production of minerals.

For instance:

- *underground mining equipment may be depreciated by on a units of production basis on a tonnes mined basis*
- *a furnace may be depreciated on a contained metal basis*
- *a well might be depreciated on a barrels lifted basis*
- *motor vehicles used by mine management staff may be depreciated on a straight-line basis*

The units of production basis may well be the appropriate method for the majority of the assets but this choice should not be prescribed for all extractive industry assets.

Sub-issue 7.1.1 – Use of different methods

If, in answering Basic Issue 7.1, you concluded it is appropriate to use straight-line depreciation on some assets in the minerals cost centre and unit-of-production depreciation on other assets in the cost centre, please explain why.

As noted above, where the straight-line method of depreciation reflects the pattern of consumption of economic benefits embodied in that asset, it should be the method used to depreciate that asset, notwithstanding that other assets may be depreciated on a units of production basis.

Sub-issue 7.1.2 – Assets that serve, or are capable of serving, two or more cost centres

What method of depreciation should be used for assets that serve, or are capable of serving, two or more cost centres?

- Unit of production depreciation should be used for all categories of costs with the exception of assets whose life is shorter than the mineral reserves, for which IAS 16 should apply.
- Straight-line (time-based) depreciation should be used for all categories of costs.
- Unit-of-production depreciation should generally be used except in certain circumstances (please describe).
- Other (please explain).**

The assets should be depreciated on a basis that reflects the expected pattern of consumption of economic benefits embodied in the asset.

Basic Issue 7.2 – Base for computing unit-of-production depreciation

How should unit-of-production depreciation be computed?

- Based on physical units.
- The gross revenue approach (please explain which prices you would use).
- The net revenue approach (please explain which prices and costs you would use).

The units of production basis used should reflect the expected pattern of consumption of the economic benefits embodied in the asset. For the majority of assets, the consumption of economic benefits might be related to the physical units processed. Any standard on the extractive industries should not dictate which method is used, but provide guidance on the application of the general principles to particular situations.

Basic Issue 7.3 – Base de preciation on quantity of ore or mineral content

Is it permissible to compute depreciation based on the physical quantity of ore produced, or should depreciation be based on the physical quantities of the mineral content?

- Ore produced.
- Mineral content.

Again, the most appropriate measure that reflects the consumption of the economic benefits embodied in the asset should be used as the basis of units of production depreciation. Most mining activities use assets that create, move or process tonnes of ore and so these assets should be depreciated on this basis. Other aspects of the process may be aligned with the mineral or 'finished product' content (this may be concentrate or unrefined precious metals in some cases) and depreciation of the assets used in this process should be depreciated on this basis.

Basic Issue 7.4 – Category of reserves for unit-of-production depreciation

Assuming that the unit-of-production method is deemed appropriate for depreciation of capitalised preproduction costs once production has begun, on which category of reserves would you base depreciation of costs capitalised for each phase of activity in the table below? Assume that costs have been appropriately adjusted to reflect the reserves used in the calculation. If your answer would be different for the mining industry and the petroleum industry, please indicate how and why. If none of the four columns represents your view, please explain.

Phase of Activity <i>In answering this question, assume that costs relating to the phase identified below will be capitalised</i>	Depreciate based on proved developed reserves	Depreciate based on proved and undeveloped reserves	Depreciate based on proved and all or part of probable reserves	Depreciate based on proved, probable, and possible reserves
Prospecting costs				
Acquisition costs — proved properties				
Acquisition costs — unproved properties				
Exploration costs Appraisal and evaluation costs				
Development costs				
Construction costs Capitalised costs recognised when a provision is made (see Chapter 8)				
Capitalised removal and restoration costs (IAS 37)				

The depreciation basis used and costs depreciated must be determined on a consistent basis across all categories. Therefore, if reserves are used as the basis for units-of-production basis, only those capitalised costs incurred, or expected to be incurred, in relation to those reserves would be depreciated.

In general, our preference would be for all proved/proven reserves, and an appropriate proportion of probable reserves, should be used as the basis for units-of-production depreciation.

However, difficulties can arise in practice when a mining operation is “open at depth” and not explored to an extent that allows the mineralisation to be classified as a proven or probable reserve. In some cases, mine production is sourced from these areas without being classified as reserves. Furthermore, mine plans may be based on an assumption of a certain amount of “high confidence” resources/mineralisation being mined or developed without being proven up and classified as a reserve. In these situations, it would appear appropriate to include a certain proportion of these reserves in the calculation of depreciation. We recommend that any extractive industries standard address this issue.

Sub-issue 7.4.1 – Consideration of proved undeveloped reserves in computing depreciation

If only proved developed reserves are used in computing depreciation in a cost centre, what consideration, if any, should be given to proved undeveloped reserves, including costs already incurred on such reserves and future costs to develop the reserves? If your answer would be different for petroleum industry and mining industry, please explain how and why.

- a. Depreciate all incurred costs, including those attributable to proved undeveloped reserves.
- b. **Depreciate only those incurred costs attributable to the proved developed reserves. Do not depreciate costs attributable to proved undeveloped reserves.**
- c. Other (please explain).

As noted above, the costs depreciation and basis for depreciation should be consistent. In this situation, costs associated with proved undeveloped reserves should be capitalised and depreciation commenced once they are developed. The assets carried forward should be subject to an impairment test.

Sub-issue 7.4.2 – Depreciation and future preproduction costs

If only proved (but not probable or possible) reserves are to be included in the reserve base for calculating unit-of-production depreciation, what consideration, if any, should be given to future costs to complete the development of proved undeveloped reserves (estimated future exploration, appraisal, development, and construction costs)?

- a. **Add to depreciable incurred costs the estimated future costs for exploration and development that will be necessary to develop the proved undeveloped reserves (but not the costs necessary to develop probable reserves).**
- b. Add to depreciable incurred costs the estimated future costs for exploration, appraisal, and development that will be necessary to develop the proved undeveloped and probable reserves.
- c. Do not add estimated future costs to the depreciable base.

Sub-issue 7.4.3 – Depreciation and future preproduction costs

If all proved and probable (but not possible) reserves are to be included in the reserve base for calculating unit-of-production depreciation, what consideration, if any, should be given to future costs to complete the development of undeveloped reserves (estimated future exploration, appraisal, development, and construction costs)?

- a. Add to depreciable incurred costs the estimated future costs for exploration and development that will be necessary to develop the proved undeveloped reserves (but not the costs necessary to develop probable reserves).
- b. **Add to depreciable incurred costs the estimated future costs for exploration, appraisal, and development that will be necessary to develop the proved undeveloped and probable reserves.**
- c. Do not add estimated future costs to the depreciable base.

Sub-issue 7.4.4 – Depreciation and future preproduction costs

If all proved and probable and possible reserves are to be included in the reserve base for calculating unit-of-production depreciation, what consideration, if any, should be given to future costs to complete the development of undeveloped reserves (estimated future exploration, appraisal, development, and construction costs)?

- a. Add to depreciable incurred costs the estimated future costs for exploration and development that will be necessary to develop the proved undeveloped reserves (but not the costs necessary to develop probable or possible reserves).
- b. **Add to depreciable incurred costs the estimated future costs for exploration, appraisal, and development that will be necessary to develop the proved undeveloped and probable and possible reserves.**
- c. Do not add estimated future costs to the depreciable base.

Basic Issue 7.5 – Depreciation if joint products are produced: quantities or revenues
When joint products are produced, should depreciation be based on the production quantity or revenue?

- a. Quantities.
- b. **Revenues.**
- c. Other (please explain).

We believe that it is appropriate to allocate costs on the basis of relative revenues.

Basic Issue 7.6 – Change in reserve estimates

Should the general requirement in IAS 8 that changes in estimates affecting depreciation should be reflected prospectively (affecting the current and future periods) and not retrospectively (affecting past periods as well as the current and future periods) apply to a change in reserve estimates?

- a. **Yes.**
- b. No (please explain).

In addition to adjusting depreciation on a prospective basis, the assets should be subject to an impairment test so that any material downward revisions to reserves will result in a writedown where the carrying value of the operation is not justified based on the lower reserve quantity. Conversely, upward revisions to reserve estimates may cause reversal of prior writedowns (see question 9.4).

Any extractive industries standard should require the disclosure of the impact on profit and loss of a change in reserve estimates.

Basic Issue 8.1 – Applicability of IAS 37

Should the general requirements of IAS 37 be applied in recognising and measuring future removal and restoration provisions by enterprises in the extractive industries?

- a. **Yes, IAS 37 should be applied.**
- b. No, IAS 37 should be modified in its applicability to enterprises in the extractive industries (please explain).

Basic Issue 8.2 – Provision arising when an asset is installed

Should an enterprise capitalise as part of the cost of the related asset the amount of a provision established for subsequent removal and restoration where the liability for performing such work is caused by the installation of the facility (illustrated in the oil rig example in Appendix C to IAS 37)?

- a. **Yes, the amount of the provision is part of the cost of acquiring the asset, and is depreciated, as illustrated in IAS 37.**
- b. No, the amount of the provision should be capitalised as a separate asset and amortised as reserves are produced (IAS 37 should be amended).
- c. No, the amount of the provision should be charged to expense when the asset is acquired (IAS 37 should be amended).
- d. No, the amount of the provision should be capitalised as a separate asset and remain, with no amortisation, to be charged to expense when the removal and restoration occur (IAS 37 should be amended).

Basic Issue 8.3 – Removal and restoration arising as a result of production

How should an enterprise recognise a provision for removal and restoration that results from production activities subsequent to the installation?

- a. **Capitalise as part of the cost of the related asset the amount of a provision established for removal and restoration where the liability for performing such work is caused by the production of minerals after the asset has been installed and future periods will benefit from the activities that gave rise to the need for removal and restoration. Expense in other circumstances.**
- b. Charge the costs to expense immediately.
- c. Other (please explain).

Basic Issue 8.4 – Discount rate

Should the discount rate used in measuring a provision be the same as the rate used in assessing impairment?

- a. **Yes (please discuss).**
- b. No (please discuss).

We believe that it is appropriate to use consistent discount rates when measuring impairment and a provision. We recognise that IAS 36 uses a discount rate that reflects asset-specific risks and IAS 37 uses a rate that reflects liability-specific risks (the price that someone would charge to take the liability off the company's hands). It is unclear whether these are the same rate.

Basic Issue 8.5 – Changes in provisions other than for changes in the discount rate

Should changes in the estimated amount of a provision for removal and restoration after it is initially recorded (other than those resulting from changes in the discount rate – see next issue) be recognised in subsequent periods?

- a. **Yes.**
- b. No, the obligation is fixed when the provision is initially recognised.

Basic Issue 8.6 – Changes in the discount rate

Should changes in the discount rate(s) in periods after a provision for removal and restoration is initially recorded be considered in calculating the provision needed in subsequent periods?

- a. **Yes, use the current market assessment of the discount rate.**
- b. No, the discount rate is fixed when the provision is initially recognised.

Basic Issue 8.7 – Treatment of the effect of a change in a provision

If a change is recognised in the amount of a provision after the provision is initially recognised, does the amount of the change adjust the carrying amount of any asset arising from the original recognition of the provision, or is it reported in net profit or loss for the period?

- a. Adjust the carrying amount of the asset only where borrowing costs are capitalised.
- b. Adjust the carrying amount of the asset in all cases.
- c. Report it in net profit or loss for the period.

We believe the treatment of the resultant liability is dependent upon the nature of the change in the liability. Where the change in the provision is due to a change in estimate of the nominal amount expected to be ultimately settled, this should be capitalised into the asset. Where the change is due to the expected time of settlement getting closer, this is really an interest expense and should be treated as a borrowing cost.

Basic Issue 8.8 – Deposits to fund dismantlement, removal and abandonment

If an enterprise is required to contribute to a statutory fund for dismantlement, removal and abandonment, should the deposits contributed to the fund be recognised as an asset?

- a. **Yes: where the deposits can be relied upon to reduce the amount of the liability for dismantlement, removal, and abandonment.**
- b. No (please explain).

Basic Issue 9.1 – Reserve category for impairment

Your response to the issues in Chapter 6 indicated which costs you would capitalise as relating to reserves, including whether you would capitalise costs whose outcome is not yet known (paragraphs 6.29-6.30). Consistent with that response, which category of reserve quantities would you use for assessing impairment of those capitalised costs to which reserves have been attributed?

- a. Proved developed only.
- b. Proved developed and undeveloped only.
- c. **Proved and probable only.**
- d. Proved, probable, and possible.
- e. No specific reserve category. Instead, Management's best estimate of likely cash flows.
- f. Other (please explain).

If your answer would be different depending on whether successful efforts, area-of-interest, or full cost is applied, please explain.

Basic Issue 9.2 – Cash generating unit

IAS 36 provides that in estimating value in use, cash flows should be identified with individual assets, if possible. If this is not possible, cash flows should be determined for the smallest cash-generating unit (CGU) possible. In general, how should the CGU be identified for assessing impairment of preproduction costs?

- a. **Same as the cost centre.**
- b. Geologically determined.
- c. Based on how the activity is managed.
- d. Geopolitical boundaries.
- e. The extractive industries Standard should not provide industry-specific guidance regarding the CGU.
- f. Other (please describe).

Under our response to Basic Issue 6.14, the individual field or mine would be the cost centre. Normally, that would be the smallest CGU as well.

Basic Issue 9.3 – Discount rate

IAS 36 provides guidance for determining the discount rate to be used in measuring impairment of mineral assets, including a provision that a pre-tax rate should be used. Is industry-specific guidance needed in an accounting standard for the extractive industries?

- a. **Yes (please explain).**
- b. No, the general guidance in IAS 36 is appropriate.

To assist in consistency of approach between the extractive industries enterprises, it would be useful to provide industry specific guidance in any accounting standard. This should provide detail of how discount rates can be determined, address issues such as political risk and whether this should be taken into account when determining the discount rate and so on.

Basic Issue 9.4 – Reversal of impairment provisions

IAS 36 calls for the reversal of impairment provisions if there is a recovery in the value of an asset or cash-generating unit on which impairment has been recorded. Are there special considerations involving reversals of impairment of mineral assets that should be included in a Standard issued on accounting for the extractive industries?

- a. **Yes (please explain).**
- b. No, the general guidance in IAS 36 is appropriate.

The value of extractive industries operations can vary widely with the selling price of the product produced and new or revised reserve estimates. An extractive industries standard should outline how to treat various scenarios when determining whether an impairment loss should be reversed. For instance, should a large increase in reserves due to exploration success lead to an impairment loss reversal? What about an increase in the per-unit market price for reserves rather than an increase in estimated quantity?

Basic Issue 9.5 – Impairment of deferred preproduction costs that are not attributed to a cash generating unit

If any preproduction costs are deferred until success or failure is known, how should impairment be assessed?

- a. **Follow IAS 36.**
- b. Impose a time limit. It might be (a) an exact time limit such as one year or two years or (b) a time limit that is invoked only if no activity is currently under way relating to the cash generating unit.
- c. If there is a large homogeneous group of properties, depreciate the deferred preproduction costs on some systematic basis as a surrogate for impairment.
- d. A combination of the above depending on the nature of the asset (please explain).
- e. Exclude the costs from an impairment test because impairment cannot be measured.

As explained in basic issue 6.1, we believe that these assets should only be capitalised to the extent that they do not exceed their fair value (where fair value can be determined) or otherwise expensed. Therefore, these assets should be effectively recognised on a lower of cost or fair value basis which is consistent with the impairment test in IAS 36.

Basic Issue 10.1 – Include extractive industries under IAS 18?

IAS 18, Revenue, does not apply to revenue arising from “the extraction of mineral ores”. If revenue issues unique to upstream activities in the extractive industries are addressed in an extractive industries Standard, should IAS 18 be amended to eliminate the scope exclusion?

- a. Yes, IAS 18 should be amended to eliminate the scope exclusion. The extractive industries Standard should address unique revenue recognition issues.
- b. **No (please explain which aspects of IAS 18 are not appropriate for the extractive industries).**

In general, the requirements of IAS 18 should be applied to the extractive industries. However, there is one area where the application of IAS 18 without amendment is not considered appropriate. This relates to the recognition of revenues prior to the commencement of the production phase (refer to our comments noted under basic issue 10.3 below).

Basic Issue 10.2 – Recognition of revenue from minerals that can be sold in ready markets

If minerals produced by an extractive industries enterprise have quoted market prices in active markets with a short time between production and sale and insignificant costs to be incurred beyond the point of production, and the minerals are intended to be sold in that market, when should revenue be recognised?

- a. At the point in the production process at which the minerals are first capable of being sold.
- b. At the point at which a sale contract is entered into.
- c. **When the general criteria for revenue recognition from the sale of goods in IAS 18, Revenue, have been met.**

Sub-issue 10.2.1 – Recognition of revenue from minerals that can be sold in ready markets but that will be used internally

If minerals described in Basic Issue 10.2 (quoted market prices, active markets, insignificant after-production costs) are intended to be further processed by the enterprise – that is, to be transferred within the enterprise for use in downstream activities – when should revenue be recognised?

- a. At the point in the production process at which the minerals are first capable of being sold.
- b. At the point at which a sale contract is entered into.
- c. **When the general criteria for revenue recognition from the sale of goods in IAS 18, Revenue, have been met.**

Basic Issue 10.3 – Revenue received prior to the production phase

If some minerals are produced and sold prior to the beginning of the production phase – for example, during testing in the development phase – how should the proceeds be accounted for?

- a. As revenue or other income.
- b. **As a reduction of capitalised costs.**

In the majority of mining and petroleum operations, there is a commissioning phase during which test runs of ore or other product are used to optimise the operation's performance. There may be substantial costs involved during this phase and they form part of the cost of establishing the operation, not operating costs. There are future economic benefits derived from these costs, in the form of future operational efficiencies, reduction in operating costs and other items and so they should be correctly capitalised.

There may be some product produced from the commissioning phase of the operation and this is generally sold. We believe that the proceeds from sale of this product should be treated as a reduction of capitalised costs, rather than revenue, for a number of reasons. If revenue is recognised, an amount is left in capitalised costs that will not produce future benefits because the related minerals were already produced and sold during the preproduction period. Also, the proceeds are in the nature of a "by-product" from the commissioning of the plant. If such amounts were to be treated as revenues, it would be appropriate to recognise an appropriate proportion of the costs involved as an expense and to also depreciate accumulated costs to reflect the usage of the plant. It would be too difficult, and not reflect the substance of the transaction, to allocate costs from the commissioning phase as between capitalised costs and operating costs.

Basic Issue 10.4 – Revenue from an undertake, with a makeup period

If minerals are produced and sold at a fixed or determinable price under a sale contract that requires delivery of a minimum quantity and sometimes a maximum quantity (such as a take-or-pay contract), and the minimum quantity is not taken, but the contract does allow a fixed amount of time for the buyer to make up any minimum quantity not taken, when should revenue from the undertake be recognised?

- a. In the period in which the undertake occurred, without regard to the makeup period.
- b. At expiry of the makeup period.
- c. **At the earlier of expiry of the makeup period and when it becomes obvious that there will not be a complete makeup.**
- d. At the time payment is received for the undertake.

Basic Issue 10.5 – Overlifts and underlifts

If, in a given period, a participant in a joint venture takes and sells more than its share of production (overlift) or less than its share of production (underlift), how should the imbalance be accounted for?

- a. Sales method.
- b. **Entitlements method.**
- c. Other (please explain).

Sub-issue 10.5.1 – Sales method: adjustment of production costs?

If the sales method is used to account for an overlift (underlift) imbalance, should the owner in an overlift situation record a liability and an increase to operating expenses (or, in an underlift situation, a prepaid expense and a reduction of operating expenses) for the share of expenses related to the imbalance paid (owed) by the owner?

- a. **Yes.**
- b. No.

Sub-issue 10.5.2 – How to price overlifts and underlifts

If the joint operating agreement (contract) provides for makeups (overlifts and underlifts) in quantities without specifying a particular price, what price should be used to price overlifts and underlifts for accounting purposes?

- a. Please describe the price you would use.

A price equivalent to that for which the product could be sold – usually the spot price of the product on the day.

Basic Issue 10.6 – Royalties paid in cash

How should the producer account for cash royalties owed to the royalty owner? [Note: It is generally recognised that measurement of the producer’s reserve quantities should be consistent with the inclusion or exclusion of royalty amounts in the producer’s gross revenue.]

- a. **Include royalty amount in producer’s gross revenue and deduct the amount paid to the royalty owner as an expense.**
- b. Exclude the royalty amount from the producer’s net revenue.

Sub-issue 10.6.1 – Royalties taken in kind

If the royalty owner takes production in kind, rather than a cash payment, how should the producer account for the royalty quantity of production?

- a. **Include the value of the production taken by the royalty owner in producer’s gross revenue and deduct that amount as an expense.**
- b. Exclude the royalty amount from the producer’s net revenue.

Basic Issue 10.7 – Severance taxes

Should severance taxes paid in cash (rather than in kind) be included in the producer’s revenue and expenses?

- a. **Yes, include.**
- b. No, exclude.

Basic Issue 11.1 – Recognition of work-in-process inventories

At what point in the production process should an extractive industries enterprise recognise work-in-process inventories?

- a. **When first segregated.**
- b. When brought to the surface.
- c. After crude field-type processing.
- d. After fine processing and by-product separation.
- e. Do not recognise work-in-process inventories.

Basic Issue 11.2 – Recognition of finished goods inventories

At what point in the production process should an extractive industries enterprise recognise finished goods?

- a. When first segregated.
- b. When brought to the surface.
- c. After crude field-type processing.
- d. After fine processing and by-product separation.
- e. Do not recognise finished goods inventories.

At the point where the product is either in a saleable condition or is not to be processed further by the reporting enterprise (such as when base metals concentrates are produced or gold doré is poured ready for refinement). Generally, but not always, this would be after fine processing and by-product separation.

Basic Issue 11.3 – Cost or fair value basis for measuring inventories

If minerals produced by a extractive industries enterprise have quoted market prices in active markets with a short time between production and sale and insignificant costs to be incurred beyond the point of production, and the minerals are intended to be sold in that market, should those inventories be measured on the basis of historical costs or on the basis of fair value (net realisable value)?

- a. **Historical cost basis (lower of cost and net realisable value).**
- b. Fair value basis (net realisable value).

Basic Issue 11.4 – Items included in inventory cost

If the historical cost approach to measuring inventories is used as described in IAS 2, which of the following items should be included in costs for this purpose (you can choose more than one)?

- a. **Direct out-of-pocket costs (does not include depreciation and overhead).**
- b. Depreciation of capitalised preproduction costs.
- c. Depreciation of the producing facilities.
- d. Overhead related directly to the production function.
- e. General overhead costs allocated from higher levels in the organisation.
- f. Other (please explain).

Basic Issue 11.5 – Joint products

How should production costs be allocated between the joint products?

- a. On the basis of physical measures (such as weight, volume, and energy content).
- b. **On the basis of relative values.**
- c. Should not be allocated.
- d. Other (please explain).

To allocate joint costs on other than the basis of relative values produces a nonsensical accounting result and does not reflect the economic reality of the operation.

Basic Issue 12.1 – Recognition or nonrecognition of a gain and loss on inception of an agreement

Should an International Accounting Standard establish general rules for recognition or nonrecognition of a gain or loss at the inception of a cost sharing arrangement, that is, when the parties have fulfilled their obligations under the agreement? Alternatively, instead of establishing general rules, should an International Accounting Standard establish specific rules for recognition or nonrecognition of a gain or loss for specific types of risk and cost sharing arrangements (for instance, farm outs, unitisations, and carried interests) from which principles for other types of arrangements can be analogised?

- a. **IASC should develop general rules (as part of your response, please identify what those general rules should be and their relation to existing International Accounting Standards).**
- b. IASC should develop specific rules for farm outs, unitisations, carried interests, and perhaps a few other types of arrangements rather than general rules (as part of your response, please identify what those specific rules should be and their relation to existing International Accounting Standards).

In responding to Issues 12.2 through 12.7, please assume that specific rules for specific kinds of arrangements will be developed.

Basic Issue 12.2 – Transferor accounting for a farm-out and similar arrangements

Should any profit or loss be recognised by the transferor on the transfer of a share of the mineral interest in a property in exchange for exploration and development of that property by the transferee, such as in a farm out as described in paragraphs 12.8-12.9?

- a. **Yes (please explain your reasons).**
- b. No (please explain your reasons).

We believe the recognition of a profit or loss in this situation reflects the economic substance of the transaction and is more consistent with the treatment of other sales transactions that are satisfied other than by way of cash.

Sub-issue 12.2.1 – Transferor accounting for costs of interest given up

If the transferor recognises no profit or loss on the transaction, how should the costs related to the interest in the property given up be accounted for by the transferor?

- a. Treated entirely as the cost of the mineral interest retained.
- b. **Allocated between the mineral interest retained and the services or assets provided by the transferee (accounting for the portion allocated to services or assets provided by the transferee would depend on the approach to historical cost accounting used by the enterprise in accounting for preproduction costs).**
- c. Other (please describe).

Sub-issue 12.2.2 – Measurement of profit or loss by transferor

If the transferor does recognise a profit or loss on the transaction, how should the profit or loss be measured?

- a. **Comparison of value of assets or services received with the cost of the mineral interest transferred.**
- b. Comparison of value of assets or services received with the value of the mineral interest transferred.
- c. Other (please describe).

Basic Issue 12.3 – Transferee accounting for farm-outs and similar conveyances

If an enterprise (transferee) receives a mineral interest in a property in return for exploring and developing that property, such as in a farm out as described in paragraphs 12.8-12.9, should the transferee recognise a profit or loss from carrying out the exploration and development?

- a. Yes (please explain your reasons).
- b. **No (please explain your reasons).**

The actual cost of the exploration and development carried out should be treated as part of the acquisition cost of the mineral interest. Whether the transaction is effected through the payment of a cash amount or provision of non-cash consideration should not affect the accounting of the transaction.

Sub-issue 12.3.1 – Transferee accounting for costs incurred

If the transferee recognises no profit or loss on the transaction, how should the costs incurred in the exploration and development be accounted for by the transferee?

- a. Treated entirely as exploration and development costs (accounting for the exploration and development costs by the transferee would depend on the approach used in accounting for similar preproduction costs).
- b. Allocated between the mineral interest received and exploration and development costs (accounting for the exploration and development costs by the transferee would depend on the approach used by the transferee in accounting for similar preproduction costs).
- c. Other (please describe).

Refer to our comments at basic issue 12.3 above.

Sub-issue 12.3.2 – Measurement of profit or loss by transferee

If the transferee does recognise a profit or loss on the transaction, how should the profit or loss be measured?

- a. Comparison of value of the mineral interest received with the share of the exploration and development cost related to the mineral interest retained by the transferor.
- b. Other (please describe).

We do not believe that a profit or loss should be recognised.

Basic Issue 12.4 – Accounting for carried interests

Would you propose any different accounting for a carried interest, by either the transferor (the carried party) or the transferee (the carrying party), than you recommend for farm-outs in your responses to Basic Issues 12.1, 12.2, and 12.3 and related Sub-issues?

- a. Yes (please explain).
- b. **No.**

Basic Issue 12.5 – Accounting for unitisations, no cash payment

If a unitisation does not involve a cash equalisation payment by one party to the other party(ies), would you propose any different accounting for a unitisation than you recommend for farm-outs in your responses to Basic Issues 12.1, 12.2, and 12.3 and related Sub-issues?

- a. Yes (please explain).
- b. **No.**

Basic Issue 12.6 – Accounting for unitisations with a cash payment for equalisation: recipient

If a unitisation involves a cash equalisation payment by one party to the other party(ies), how should the recipient account for the payment?

- a. **The recipient treats the equalisation payment as a recovery of the carrying amount of the specific costs for which equalisation is being made. If the amount received exceeds that carrying amount, a gain is recognised**
- b. The recipient treats the equalisation payment as a recovery of the carrying amount of the recipient's total investment. Only if the amount received exceeds that carrying amount is a gain recognised.

Basic Issue 12.7 – Accounting for unitisations with a cash payment for equalisation: payer

If a unitisation involves a cash equalisation payment by one party to the other party(ies), how should the payer account for the payment?

- a. **Payer treats the payment as part of its investment in the property.**
- b. Other (please describe).

Basic Issue 12.8 – Joint ventures

Should joint ventures created and operated under joint operating agreements in the extractive industries be accounted for as provided in IAS 31, or should special provision be made for joint ventures in the extractive industries?

- a. They should be accounted for by proportionate consolidation, the benchmark treatment permitted by IAS 31.
- b. They should be accounted for by the equity method, the allowed alternative permitted by IAS 31.
- c. **An enterprise should have a choice of using proportionate consolidation or the equity method, as currently permitted by IAS 31.**
- d. No. Special rules of accounting for joint ventures in the extractive industries should be provided in any Standard for the extractive industries (please explain).

We do not believe that joint ventures in the extractive industries should be treated in a different manner to joint ventures arising in other industries.

Basic Issue 12.9 – Cash consideration in a unitisation

How should cash consideration paid and received in a unitisation or similar arrangement be accounted for?

- a. **The recipient of cash reports a reduction of the asset account (with any excess to profit or loss) and the payer reports additional investment in property.**
- b. Some other approach (please specify).

Basic Issue 12.10 – Nonrecoverable costs incurred by contractor in PSC

How should the contractor in a PSC account for exploration and development costs that are not recoverable from production?

- a. **Account for the costs in the same way they would be accounted for if the contractor owned the reserves.**
- b. Some other approach (please specify).

Basic Issue 12.11 – Recoverable costs incurred by contractor in PSC

How should the contractor in a PSC account for exploration and development costs that are recoverable from production?

- a. **Account for the cost in the same way they would be accounted for if they were not recoverable.**
- b. Account for recoverable amounts as if they are receivables.
- c. Some other approach (please specify).

Basic Issue 12.12 – Infrastructure costs required to be installed by contractor

How should the contractor in a PSC account for infrastructure costs that are required by the government to be installed?

- a. If costs are necessary in order to secure contract, treat the costs as mineral acquisition costs.
- b. **Consider the costs to be acquisition, exploration or development costs, depending on the point in operations that they are incurred**
- c. Some other approach (please specify).

Basic Issue 12.13 – Cost recovery oil

How should the contractor in a PSC account for proceeds of sale, or value of oil taken, relating to cost recovery oil?

- a. **As revenue from production.**
- b. As reduction of cost for which recovery is being received.
- c. Some other approach (please specify).

Basic Issue 12.14 – Depreciation of capitalised costs

How should the contractor in a PSC depreciate capitalised costs?

- a. **In the usual manner (mainly through unit-of-production).**
- b. On a contractual basis.
- c. Some other approach (please specify).

Basic Issue 12.15 – Assets to which title has passed to government

How should the contractor in a PSC account for the cost of assets to be used in production when title to the assets has passed to the host government?

- a. As an expense.
- b. **As an asset, as if title was retained by contractor.**
- c. Some other approach (please specify).

If the amount satisfies the definition of an asset in accordance with the Framework than the cost should be capitalised as an asset. If the contractor is exposed to the majority of risks and returns of ownership, then it is likely that they beneficially own the asset.

Basic Issue 12.16 – Inclusion of cost recovery oil in reserves for purposes of depreciation and impairment

Should the contractor include in reserves to be used for calculating depreciation and impairment those barrels of oil expected to be received as cost recovery oil?

- a. **Include the barrels for those purposes, even if the recovered amount is treated as reduction of asset accounts.**
- b. Include the barrels for those purposes only if the recovered amount is included in revenues.
- c. Some other approach (please specify).

Basic Issue 12.17 – Contractor’s expected reserves if title is not held to reserves

Should the contractor include in reserve disclosures expected reserves if title to the reserves is not held by the contractor but is held by the government?

- a. **Include these reserves along with other reserves as though the contractor held title to them.**
- b. Disclose such reserves, but show them separately from reserves to which contractor holds title.
- c. Do not disclose reserves to which title is retained by the government.
- d. Some other approach (please specify).

It would however be useful to users of the financial report to be aware of the different types of ownership of reserves, perhaps by way of additional disclosure.

Basic Issue 12.18 – Income taxes of contractor paid by a government oil company

How should the contractor account for income taxes paid on its behalf by a government oil company out of production, and the related production taken by the government?

- a. **Report the amount taken as taxes in the income statement as revenue and as income taxes paid**
- b. Ignore both the income tax and the production involved
- c. Some other approach (please specify)

Basic Issue 13.1 – Purchased exploration

If an enterprise acquires an undeveloped mineral property that has been partly explored, should the cost of the property include the portion of the purchase price deemed to apply to the seller’s exploration costs or other costs that the acquirer would charge to expense if it had incurred those costs directly?

- a. **Yes, those costs should remain as part of the cost of the purchased mineral property.**
- b. No, the portion of the purchase price relating to the seller’s prospecting and exploration costs should be charged to expense at the time of the acquisition.

Basic Issue 13.2 – Purchase of mineral property - allocation of purchase price

If an enterprise acquires a mineral property that has been partially or fully developed, how should the acquisition cost be allocated between (a) the mineral property, (b) tangible equipment and other tangible assets, and (c) intangible development costs?

- a. **Record tangible assets at estimated fair value, with the excess of purchase price to mineral property, none to an intangible asset.**
- b. Record both tangible assets and intangible assets at estimated fair value, with the excess of purchase price to mineral property.
- c. Record identifiable tangible and intangible assets at estimated fair value, with the excess of purchase price to goodwill

It is conceivable that goodwill could arise in the acquisition of a mineral property, although it may be expected to be a relatively small proportion of the overall consideration. Mineral properties are an identifiable asset that should be recorded as an asset at fair value on acquisition (like any other asset). These types of acquisitions should be treated the same as acquisitions in other industries.

Basic Issue 13.3 – Allocation of cost of a portfolio of mineral properties

If an enterprise acquires a portfolio of mineral properties, how should the acquisition cost be allocated to individual properties?

- a. First assign the cost to each proved property based on its estimated fair value and then assign the remainder to unproved properties.
- b. **Allocate the cost to each proved and unproved property based on their estimated relative fair values, and recognise no goodwill.**
- c. Allocate the cost to each proved and unproved property based on its estimated fair value, and recognise the excess as goodwill.
- d. Other (please describe).

Basic Issue 13.4 – Purchase of an enterprise - allocation of purchase price

If an enterprise purchases another enterprise that has been engaged in exploration and production activity, should any portion of the purchase price be allocated to goodwill?

- a. Yes. Record the mineral property and tangible assets acquired at their estimated fair values (and possibly to identifiable intangible assets as well), with the excess of purchase price allocated to goodwill.
- b. **No. Record the tangible assets acquired at their estimated fair values (and possibly identifiable intangible assets as well), with the excess of purchase price allocated to the mineral property and none to goodwill.**

Basic Issue 13.5 – Sale of a noncommercial property that is part of a group (portfolio)

If one noncommercial mineral property is sold for an amount different from the carrying amount of that individual property, and that property is part of a group of properties that is being accounted for as a portfolio, should a gain or loss be recognised on the sale?

- a. **Yes (please explain).**
- b. No (please explain).

The sale of this type of asset for an amount different to its historical cost should be recognised as a profit or loss in the same manner as other assets.

Basic Issue 13.6 – Gain or loss recognition on sale of partial interests

If an enterprise sells a part of its interest in a noncommercial mineral property that is not being accounted for as part of a group [see Basic Issue 13.4], while retaining the remaining interest, should a gain or loss be recognised? Please explain your reasoning.

- a. **Yes, no matter whether the sale is of a divided interest or an undivided interest.**
- b. Yes, but only if the sale is of a divided interest.
- c. No in either case.

Basic Issue 13.7 – Sale of partial interest in a property with commercially recoverable reserves

If an enterprise sells a part of its interest in a commercial mineral property for an amount different from the carrying amount of the interest sold, and that property is an individual cost centre, should a gain or loss be recognised on the sale? Please explain your reasoning.

- a. Yes, no matter whether the sale is of a divided interest or an undivided interest.
- b. Yes, but only if the sale is of a divided interest.
- c. No in either case.

Sub-issue 13.7.1 – Allocation of carrying amount

If an enterprise sells a divided interest in a commercial mineral property, and gain or loss is to be recognised, how should the carrying amount of the property be allocated between the interest sold and the interest retained?

- a. **Relative fair values of the properties.**
- b. Relative quantities of commercial reserves sold and commercial reserves retained.
- c. Other (please explain).

Basic Issue 13.8 – Sale of a property with commercially recoverable reserves that is part of a depreciable cost centre

If one commercial mineral property is sold and that property is part of a larger depreciable cost centre, should a gain or loss be recognised on the sale?

- a. Yes (please explain how the gain or loss on the individual property would be calculated).
- b. No. The proceeds should be treated as a recovery of cost of the group of properties.

Basic Issue 13.9 – Retirement or abandonment of an asset that is part of a group

Should a gain or loss be recognised on the retirement or abandonment of an individual asset that is part of a group of assets on which depreciation is being computed (for example, all of the assets in a mine)?

- a. Yes (please explain how gain or loss on the individual property would be calculated).
- b. No.
- c. Depends on the circumstances (please explain).

Basic Issue 14.1 – Supplemental reserve disclosures (quantity or value)

If a historical cost based method is used for the primary financial statements, do you favour supplemental disclosures based on quantities or values of reserves?

- a. Favour disclosure of reserve quantities but not reserve values.
- b. Favour disclosure of reserve quantities and reserve values.
- c. Do not favour disclosure of reserve quantities or reserve values.

The disclosure of reserves should be mandatory, but reserve values optional. Non-financial disclosures such as quantities of reserves should be disclosed outside of the financial statements themselves.

Basic Issue 14.2 – Disclosure of reserve quantities by geographical area

If reserve quantities are disclosed, should the disclosure be on an enterprise-wide basis or subdivided geographically or geologically?

- a. Enterprise-wide.
- b. Home country plus other significant countries individually.
- c. Geographical groupings that reflect differences in risk.
- d. Geological groupings.
- e. Individually significant mines or fields, and in total for other reserves.
- f. Other.

Basic Issue 14.3 – Categories of reserves for quantity disclosures

If reserve quantities are to be disclosed, which separate categories of reserves would you use for disclosure of reserve quantities?

- a. Proved developed only.
- b. Proved only (both developed and undeveloped). Note that Sub-issue 14.3.1 asks about disclosing these separately or combined.
- c. Proved and probable only. Note that Sub-issue 14.3.2 asks about disclosing these separately or combined.
- d. **Proved, probable, and possible. Note that Sub-issue 14.3.3 asks about disclosing these separately or combined.**

Sub-issue 14.3.1 – Proved developed and undeveloped combined or separately

If total proved reserve quantities are to be disclosed, should separate disclosure be required of proved developed and proved undeveloped reserve quantities?

- a. **Disclose proved developed and proved undeveloped separately.**
- b. Disclose a combined measure of proved developed and undeveloped reserves.

Sub-issue 14.3.2 – Proved and probable combined or separately

If proved and probable reserve quantities are to be disclosed, should separate disclosure be required of proved and probable reserve quantities?

- a. **Disclose proved and probable separately.**
- b. Disclose a combined measure of proved and probable reserves.

Sub-issue 14.3.3 – Proved, probable, and possible combined or separately

If proved, probable, and possible reserve quantities are to be disclosed, should separate disclosure be required of proved, probable, and possible reserve quantities?

- a. **Disclose proved, probable, and possible separately.**
- b. Disclose a combined measure of proved, probable, and possible reserves.

Basic Issue 14.4 – Disclosure of mineral resources

Should quantities of estimated mineral “resources” be disclosed, and if so what categories of resources should be disclosed?

- a. Measured, indicated, and inferred resources quantities.
- b. Only measured and indicated resources quantities.
- c. Only measured resource quantities.
- d. **Allow an enterprise to choose between (b) and (c) above, but inferred resources should not be disclosed**
- e. Resources should not be disclosed.

Basic Issue 14.5 – Disclosure of grade factors for minerals

If mineral reserve quantities are disclosed by mining enterprises, should grade factors and content or mix of minerals be disclosed?

- a. **Yes.**
- b. No.
- c. Other (please explain).

Basic Issue 14.6 – Number of periods for reserve quantity disclosures

If reserve quantities are to be disclosed, for how many financial periods should they be disclosed?

- a. **Current period only.**
- b. Current period and immediately preceding comparable period.
- c. Each period for which financial statements are presented.
- d. Other (please describe).

Basic Issue 14.7 – Reconciliation of proved reserve quantities

If a schedule reconciling beginning and ending proved reserves is presented, are the following line items appropriate?

- Revisions of previous estimates.**
 - Production.**
 - Discoveries and extensions.**
 - Additions as the result of installing improved recovery methods.**
 - Purchases of commercial reserves in place (that is, purchases of mineral properties).**
 - Sales of commercial reserves in place (that is, sales of mineral properties).**
 - Other changes.**
- a. **Yes.**
 - b. No (please explain).

Each of the items listed above should be reported in the reconciliation.

Basic Issue 14.8 – Reconciliation of probable reserves

If a schedule reconciling beginning and ending probable reserves is presented, are the line items identified in Basic Issue 14.7 appropriate, except that “transfers to proved reserves” would replace “production”?

- a. **Yes.**
- b. No (please explain).

Although sometimes production can be sourced from probable reserves without those reserves meeting the definition of “proved” reserves.

Basic Issue 14.9 – Disclosure of an equity method associate’s reserves

How, if at all, should an investor report its share of reserves controlled by an associate accounted for under the equity method?

- a. The investor should combine its share of the associate’s reserves with those controlled directly by the investor.
- b. **The investor should disclose its share of the associate’s reserves separately from the reserves controlled directly by the investor.**
- c. The investor should not disclose its share of the associate’s reserves.

We more strongly favour the disclosure of the share of a joint venture entity’s reserves (subject to joint control) than an associate (subject to significant influence).

Basic Issue 14.10 – Minority interest in reserves of a subsidiary

If an enterprise’s reserves include reserves of a subsidiary with a significant minority interest, how should the minority interest in the reserves be presented?

- a. Disclosed separately as a deduction from enterprise reserves.
- b. Excluded from the quantities and values reported for the enterprise’s reserves.

We do not have an opinion on this issue so long as the total reserves disclosed are reflected by reference to the parent entity’s share.

Basic Issue 14.11 – Valuation method for the purpose of supplemental disclosure

If the values of reserves are to be disclosed, which valuation method should be used?

- a. **Fair value (the amount for which the reserves and related assets could be exchanged between knowledgeable, willing parties in an arm's length transaction).**
- b. Net selling price (fair value, less the costs of disposal).
- c. Expected exit value in the due course of business (undiscounted estimated future cash flows expected to arise from the producing the minerals and from disposing of the mineral property at the end of its useful life).
- d. Value in use (discounted estimated future cash flows expected to arise from the producing the minerals and from disposing of the mineral property at the end of its useful life).
- e. A “standardised measure” applying a single set of assumptions, including a standardised discount rate, to all enterprises (which is not a true “value” measure).
- f. Current replacement cost.
- g. Other (please explain).

Basic Issue 14.12 – Which categories of reserves for value disclosures

If reserve values are to be disclosed in the notes, on which categories of reserves should the note disclosures be based?

- a. Proved developed only.
- b. Proved developed and undeveloped only.
- c. **Proved and probable only.**
- d. Proved, probable, and possible.

While we favour disclosure of quantities for possible reserves, a fair value to such reserves cannot be determined reliably.

Basic Issue 14.13 – Assumptions about prices and costs in making reserve value estimates

What assumptions should be made about price and cost factors in making reserve value estimates for disclosure purposes?

- a. **Use cost and price factors as of the date of estimation.**
- b. Use cost and price factors for a period of weeks or months prior to the date of estimation.
- c. Use cost and price factors expected to exist at the time of production.
- d. Use current costs and prices adjusted for forecasted general price level changes to the date of expected production.
- e. Use cost and price factors contained in the enterprise's budget, with extrapolation from the budget for future periods not included in the internal budget.
- f. Other (please explain).

Cost and price factors should only take into account known changes as at the balance date.

Basic Issue 14.14 – Discount rate for estimating reserve values for disclosure purposes

What discount rate should be used in making reserve value estimates for disclosure purposes?

- a. The rate on risk-free investments.
- b. **Risk-adjusted rate.**
- c. Weighted average long-term borrowing rate of the enterprise.
- d. The enterprise's incremental long-term borrowing rate.
- e. The enterprise's weighted average cost of capital.
- f. The enterprise's “hurdle rate” for similar assets.
- g. A standard rate prescribed for all enterprises in the extractive industries.
- h. Other (please describe).

Sub-issue 14.14.1 – Pre-tax or after-tax discount rate

Should the discount rate used in estimating reserve values for disclosure purposes be a pre-income-tax rate or an after-income-tax rate?

- a. Pre-tax rate.
- b. After-tax rate.

Basic Issue 14.15 – Standardised measure of future cash flows: requirement

Should a “standardised measure of future net cash flows” be required either in the notes to the financial statements or as a separate schedule?

- a. A standardised measure should not be required.
- b. A standardised measure should be required in the notes to the financial statements.
- c. A standardised measure should be required as a separate schedule outside the financial statements.

Financial analysts tend to be divided on the usefulness of such disclosures in the United States. We tend to believe that a “standardised measure of future net cash flows” would not provide meaningful information to the users of the financial statements that exceeds the cost to produce the information. However, we believe that IASB should decide this only after careful analysis of the usefulness of the existing US disclosures.

Sub-issue 14.15.1 – Standardised measure of future cash flows: measurement

If a “standardised measure of future net cash flows” were to be required, which of the following requirements should be imposed? If you disagree with any of the possible requirements, please explain why.

- a. All cost and price factors should be based on prices at the date of the financial statements, adjusted for any contractual price changes.
- b. Future income taxes should be included in the calculations.
- c. The discount rate should be set as a uniform set rate throughout the world and not changed from one period to another or one enterprise to another.
- d. Other (please explain).

We have no opinion on this issue as we do not support the disclosure of a “standardised measure of future cash flows”

Basic Issue 14.16 – Analysis of changes in estimated reserve values

If disclosures of the values of reserves are required, should an analysis of changes in estimated reserve values between the beginning and the end of the year be presented?

- a. Yes.
- b. No.

Sub-issue 14.16.1 – Items included in analysis of changes in estimated reserve values

If an analysis of changes in estimated reserve values is presented, are the following line items appropriate?

1. Revisions of quantity estimates made in the prior year.
2. Discoveries, extensions, and improved recovery of commercial reserves during the year.
3. Purchases of reserves in place.
4. Sales of reserves in place
5. Changes in price assumptions from beginning of year to end of year.
6. Changes in estimated future production and development costs.
7. Sales and intra-enterprise transfers of production during the year.
8. Accretion of the discount.
9. Change in discount rate used.
10. Development costs incurred during the period.
11. Net changes in income taxes (if after-tax value is computed).
12. Other changes (please describe).

- a. Yes.
- b. No (please explain).

Basic Issue 14.17 – Disclosure of reserve values by geographical area

If an enterprise is required to disclose estimated reserve values or a standardised measure of net cash flows, should the disclosure be on an enterprise-wide basis or subdivided geographically or geologically?

- a. Enterprise-wide.
- b. Home country plus other significant countries in dividually.
- c. Geographical groupings that reflect differences in risk.
- d. Geological groupings.
- e. **Individually significant mines or fields, and in total for other reserves.**
- f. Other.

Basic Issue 14.18 – Disclosure of information useful in computing reserve values

If reserve values themselves are not disclosed, should the financial statements include information useful in computing reserve values and, if so, what information?

- a. **Yes (please elaborate).**
- b. No.

There should be sufficient information from which a basic forecasting model of each operation could be derived. This would necessitate cost and production information, recoveries, known changes in future costs and associated factors.

Basic Issue 14.19 – Disclosure of assumptions

If an enterprise is required to disclose estimated reserve values or a standardised measure of net cash flows, should disclosure of the principal underlying assumptions be required (particularly assumed prices, costs, discount rate, timing of production, and technological factors)?

- a. **Yes (please elaborate).**
- b. No (please explain).

Basic assumptions as outlined under basic issue 14.18 above should be included.

Basic Issue 15.1 – Disclosure of costs incurred and costs capitalised

Which of the following should be disclosed (please indicate all that you think should be required)?

- a. **Costs incurred during the period to find and develop reserves.**
- b. **Costs incurred during the period to produce reserves.**
- c. **Costs capitalised as assets and costs deferred pending further information at the end of the period arising from preproduction activities.**

Basic Issue 15.2 – Value of properties held for exploration

Should the value of mineral properties held for exploration be disclosed?

- a. **Yes.**
- b. No.

Basic Issue 15.3 – Performance indicators

Which, if any, of the following should be disclosed (please indicate all that you think should be required)?

- a. Finding cost per unit of reserves discovered.
- b. **Total production costs per unit.**
- c. **Cash production costs per unit.**
- d. **Cash royalty payments.**
- e. Cash lifting costs.
- f. Cash transportation costs.
- g. **Other performance indicators (please describe).**
- h. Disclosure of performance indicators should not be required.

Production quantities should also be disclosed.

Basic Issue 15.4 – Financial disclosures

Which of the following financial disclosures should be required (please indicate all that you think should be required)?

- a. Segregate sales revenue and tariff income.
- b. Average selling price realised per unit for each mineral in each area.
- c. Estimated selling prices per unit for each mineral in each area at the end of financial reporting period.
- d. **Information about the sensitivity of reserve quantities, reserve values, and earnings to price changes.**
- e. Treatment of overhead costs (explanation of capitalisation policy and amounts capitalised).
- f. Capital spending plans, including disclosure of expected development costs in one or more future periods.
- g. Profits on disposal of properties.
- h. **Details of hedging exposures.**
- i. **Operating costs by category (determined in accordance with the requirements of IAS 1),** showing separately such items as:
 - (i) raw materials and consumables;
 - (ii) depreciation and amortisation;
 - (iii) employment costs;
 - (iv) royalties and other mining taxes;
 - (v) decrease/increase in inventories;
 - (vi) other external costs;
 - (vii) provisions;
 - (viii) exploration and evaluation;
 - (ix) research and development; and
 - (x) net foreign exchange gains/losses on monetary items.
- j. Analysis of change in earnings from one period to the next, showing separately the change in earnings caused by (i) changes in prices of minerals, (ii) changes in exchange rates, (iii) changes in volume of minerals sales, and (iv) cash cost savings.
- k. Other (please describe).

Basic Issue 15.5 – Nonfinancial disclosures

Which of the following nonfinancial disclosures should be required (please indicate all that you think should be required)?

- a. **Production quantities of each mineral in each area, such as rock mined, ore milled, and metals per tonne of ore.**
- b. Sales quantities of each mineral in each area.
- c. Contracts for sales of minerals yet to be produced.
- d. Reserve replacement ratio.
- e. Reserve-to-production ratio.
- f. Extent of management discretion about the timing of exploration activity (if exploration costs are charged to expense).
- g. Other (please describe).

Non-financial measures should not be included in the financial statements or notes thereto, but included in information attached to the financial report.

Basic Issue 15.6 – Special disclosures for individual mines: mining enterprises

Which of the following should be disclosed by mining enterprises with respect to each significant individual mine (please indicate all that you think should be required)?

- a. **The enterprise's interest.**
- b. **Type of reserve: underground, open-cut stockpile, residues.**
- c. Average grade of ore mined during the period.
- d. Amount of overburden and waste removed during the period.
- e. **Quantities of resources (as distinct from reserves).**
- f. Other (please describe).

Basic Issue 15.7 – Special disclosures: petroleum enterprises

Which of the following should be disclosed by petroleum enterprises (please indicate all that you think should be required)?

- g. Gross number of producing wells.
- h. Net number of producing wells.
- i. Gross and net exploratory wells (perhaps divided between dry holes and those finding reserves).
- j. Gross and net development wells (perhaps divided between dry holes and those finding reserves).
- k. Number of exploratory wells in progress at period end.
- l. Number of development wells in progress at period end.
- m. Number of units of each major product transferred to other segments of the enterprise.
- n. Number of units of each major product sold to outside customers.
- o. Average transfer price of each major product transferred to other segments of the producing enterprise.
- p. Other (please describe).

Basic Issue 15.8 – Balance sheet cost classification – capitalised preproduction costs

How should capitalised preproduction costs that meet the definition and recognition criteria for assets be classified in the balance sheet?

- q. As property, plant, and equipment.
- r. As an intangible asset.
- s. Costs directly attributable to facilities and equipment classified as property, plant, and equipment; all other costs classified as an intangible asset.
- t. **Other (please explain).**

Although these types of assets are intangible in nature, it will often be relevant and reliable for an enterprise to report these costs as “preproduction costs” or “exploration costs” on the face of the statement of financial performance.

Basic Issue 15.9 – Balance sheet cost classification – deferred costs

If preproduction costs are deferred as assets pending determination of whether commercially recoverable reserves have been found, how should they be classified in the balance sheet?

- a. As a separately described asset, not commingled with other asset categories.
- b. As property, plant, and equipment.
- c. As an intangible asset.
- d. Costs directly attributable to facilities and equipment classified as property, plant, and equipment; all other costs classified as an intangible asset.
- e. Other (please explain).

Basic Issue 15.10 – Environmental disclosures

Which environmental and social disclosures should be required (please indicate all that you think should be required)? Note that these might be required by an International Accounting Standard if not disclosed elsewhere in the financial report (see IAS 1.102).

- a. Compliance with environmental and social legislation.
- b. Levels of pollutant emissions.
- c. Qualitative social indicators (please provide examples).
- d. Quantitative ecoefficiency metrics such as energy consumption, waste reduction, recycling, marketing of by-products, and materials use.
- e. Strategies for conservation, for development of environmentally superior products, and for meeting future global energy needs.
- f. Investment in zero-emissions fuels and renewable forms of energy.
- g. Quantitative data about employee health.
- h. Environmental protection policies.
- i. Employment policies.
- j. Social policies.
- k. Other (please describe).

Basic Issue 15.11 – Segment information for upstream activities

Should an integrated enterprise in the extractive industries be required to report segment information for its upstream activities separately from downstream activities?

- a. Yes.
- b. No.

Sub-issue 15.11.1 – Pricing of downstream transfers by integrated enterprises

IAS 14, Segment Reporting, requires that intersegment transfers be priced at market price. Some petroleum and mining companies conduct both upstream and downstream activities. For them, some segment revenue arises from intersegment transactions. In those cases, how should the value of the intersegment transfer be measured?

- a. Current market prices for the minerals (sometimes known as posted field prices) less estimated costs that would have been incurred had those minerals been sold to an outside customer.
- b. Current market prices for the minerals (sometimes known as posted field prices) without deduction for estimated costs.
- c. Other (explain).